

*Farmington High School  
2020 - 2021 Program of Studies*



PRIDE

CMB

*Preparing Lifelong Learners*

Dear Parents/Guardians:

Please read this Program of Studies thoroughly. Included is the information you need to make an intelligent selection of courses for the 2020-2021 school year. It is imperative that the selections are made with much thought and with the involvement of your parents, teachers and school counselors.

FHS offers quality programs for its students. We want your student's success to be based on an understanding of the recommended courses in all departments, as well as the expectations that career fields, colleges, and universities have of our graduating students. We hope that you will be engaged in the course selection process and remain involved in your student's learning and overall academic programs. The high school experience is an ideal time for students to explore new areas of interest.

The course selection process is critical if your student is to become a successful individual in a rapidly changing world. The teachers, advisors, counselors, and administrators are available to help in making choices and answering questions. The time you and your student spend planning and selecting challenging programs will reap rewards later on the path leading to achievement and success.

This booklet represents our best attempt to offer a comprehensive range of courses for our students. Unfortunately, we cannot guarantee that every course in this catalog will run in the coming year because sufficient enrollment numbers often determine the courses that will be scheduled. Please understand this condition as you select courses for the coming year.

Barbara Gardner  
Principal

## MISSION STATEMENT, BELIEF STATEMENTS, CORE VALUES

### **Mission Statement:**

The mission of the Farmington School District is to develop and prepare every individual for lifelong learning and participation in a global society through quality education. The Farmington School District is a supportive learning environment for students, school staff, families, and the greater community.

### **Belief Statements:**

The Farmington School District believes that all are learners. The following statements define our beliefs about learning. We believe learning:

- encompasses discovery, development and utilization of multiple interests and abilities.
- is preparation for an extensive range of opportunities, careers and future goals.
- extends beyond the classroom.
- requires a positive culture and climate that respects diversity and encourages greatness.
- promotes personal growth and enhances leadership qualities.
- is a process that evolves to meet the challenges of the ever-changing world.

### **Core Values:**

The Farmington School District holds the following values as essential to being an active participant in education and the greater global community:

**Trust** - the belief in ourselves and others to be just, reliable, and supportive

**Integrity** - the strength of character to persevere while being ethical, responsible, and thoughtful

**Genuineness** - being honest and sincere in sharing beliefs, values, and passions with self and others

**Empathy** - the ability to feel compassion for others' feelings and opinions

**Respect** - the dignity, honor, and courtesy to value self, others, and environment

**Success** – the continual achievement of goals

**Once a Tiger, Always a Tiger!**

**Graduation Requirements:**

The tables below determine the required courses of study and graduation credit requirements to earn a diploma from Farmington High School.

**\*NOTE:** Courses that were previously a half credit are now a full credit. This might affect the specific number of credits needed in some of the content areas as listed below. Contact your school counselor with questions regarding your status in each content area if you are unsure of what you need.

<b>FHS Standard Diploma Graduation Requirements for the Class of 2021</b>		
<b>Content Area</b>	<b>Credits</b>	<b>Required Courses</b>
English	4	Freshman Seminar, one literature-focused, one writing focused
Mathematics	4 (or 3+ a math intensive)	Completion of Algebra 1 or 2 *All students must have a math course or math intensive course every year
Science	3	Physical Science, Biology, one elective
Social Studies	*Amount may vary	American Government, Economics, US History, Geography or World History
Computer Education	½	*see course selections
Physical Education	1	1 full credit of Phys. Ed
Health	½	Wellness
Art	1	*see course selections
Electives	*Amount may vary	*elective courses to total 27
<b>TOTAL</b>	<b>27</b>	

<b>FHS Diploma with Distinction Graduation Requirements for the Class of 2021</b>		
<b>Content Area</b>	<b>Credits</b>	<b>Required Courses</b>
English	4	Freshman Seminar, one literature-focused, one writing-focused
Mathematics	4	Completion of Algebra 1, Geometry, Algebra II and one elective *students must have a math course or a math intensive course every year
Science	4	Physical Science, Biology, Chemistry & one other Lab science *see selections to see which courses satisfy a lab requirement
Social Studies	4	American Government, Economics, US History, World History
Computer Education	1	*see course selections
Physical Education	1	1 full credit of Phys. Ed
Health	½	Wellness
Art	1	*see course selections
Foreign Language	2	*must be same foreign language
Electives	*Amount may vary	*elective courses to total 29
<b>TOTAL</b>	<b>29</b>	

<b>FHS Standard Diploma Graduation Requirements for the Class of 2022 and beyond</b>		
<b>Content Area</b>	<b>Credits</b>	<b>Required Courses</b>
English	4	Freshman Seminar, one literature-focused, one writing focused
Mathematics	4 (or 3+ a math intensive)	Completion of Algebra 1 or 2 *All students must have a math course or math intensive course every year
Science	3	Physical Science, Biology, elective
Social Studies	4	American Government, Economics, US History, Geography or World History
Computer Education	1	*see course selections
Physical Education	1	1 full credit of Phys. Ed
Health	1	Wellness
Art	1	*see course selections
Electives	11	*see course selections
<b>TOTAL</b>	<b>28</b>	

<b>FHS Diploma with Distinction Graduation Requirements for the Class of 2022 and beyond</b>		
<b>Content Area</b>	<b>Credits</b>	<b>Required Courses</b>
English	4	Freshman Seminar, one literature-focused, one writing-focused
Mathematics	4	Completion of Algebra 1, Geometry, Algebra II and one elective *students must have a math course or a math intensive course every year
Science	4	Physical Science, Biology, Chemistry & one other Lab science *see selections to see which courses satisfy a lab requirement
Social Studies	4	American Government, Economics, US History, World History
Computer Education	1	*see course selections
Physical Education	1	1 full credit of Phys. Ed
Health	1	Wellness
Art	1	*see course selections
Foreign Language	2	*must be same foreign language
Electives	10	*see course selections
<b>TOTAL</b>	<b>32</b>	

<p><b>FHS Diploma of Individual Achievement</b>  <b>This diploma is based on the individual student needs and IEP requirements</b></p>
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## SCHOOL COUNSELING SERVICES

In alignment with the *American School Counselors Association (ASCA) National Model*, Farmington's School Counseling program is designed to promote the academic, career, and personal/social development of all students through a variety of data driven, systematic and coordinated activities and services. Student's will be assigned to a school counselor their freshman year and will work with that counselor over the course of their high school career in establishing goals and developing future plans.

Academic/College/Career services and activities include:

### School Counseling Curriculum During REAL Time

The School Counseling Department strives to have every student college or career ready at graduation. In order to reach that goal, we work with each advisory once per quarter during Freshman, Sophomore and Junior year to build a College and Career Portfolio. This portfolio aids students in solidifying their post-graduation plan during their Senior year. We will be using SCOIR, an online college and career planning program, to deliver much of this curriculum. Completion of this curriculum will be part of students' grades in Advisory.

- 8<sup>th</sup> Grade Transition & Course Registration
- Individual Student Planning – Developing a four-year plan of study
- College & Career Exploration - SCOIR
- Testing Programs (see below)
- College Fairs
- Upward Bound & Educational Talent Search
- College Planning & Financial Aid workshops through NHHEAF
- 504 Coordination

Personal/Social development services and activities include:

- Solution-focused counseling
- Crisis response
- Conflict resolution
- Anti-bullying classroom lessons
- Red Ribbon Week
- Respect Week
- Referrals to outside counseling agencies
- Substance Abuse Prevention Program
- Homeless liaison

### REAL Time/Advisory:

*What is it?* **R**esponsible **E**ducation through **A**lternative **L**earning time is designed to provide interventions, support, enrichment, and extensions for all students.

*What about Monday's?* The first day of the academic week is "Advisor Monday," a planning day where Advisors and students jointly determine and coordinate the week's activities through an online scheduling system in PowerSchool called *Adaptive Scheduler*. Academic teachers are expected to "pre-schedule" students for REAL Time as soon as they notice students struggling in their class, whether it is in their overall performance or when it becomes evident that an important step in their learning has been missed. Teachers do not need to wait until a student's grade has fallen to a 75% to pre-schedule, and can pre-

schedule students for any reason; however, a 75% grade is considered the threshold to pre-schedule a student for mandatory support.

*What about students who do NOT need additional support or interventions?* It is important to remember that REAL time is an academic block. Students earn ¼ credit per semester, on a Pass/Fail basis, provided they are utilizing REAL time for: interventions, support, enrichment or extensions. Students who do not require support or interventions are expected to engage in some form of enrichment or extension of learning in order to earn a passing grade. *“Extended learning” means the primary acquisition of knowledge and skills through instruction or study outside of the traditional classroom methodology, including, but not limited to: Independent study, private instruction, performing groups, internships, community service, apprenticeships, and online courses, (Ed 306.02.i).* See Extended Learning Opportunities below for additional information.

**REGISTERING FOR CLASSES & ADD/DROP POLICY:**

We do our best to get students in the classes they want however, scheduling conflicts, class counts and required courses sometimes prevent that. It’s important to talk with your counselor and revisit your four-year plan to ensure you’re getting placed in the classes that support your post-secondary college and/or career goals.

- All course registrations must be approved by appropriate teachers, counselor, and parent/guardian. This ensures that all parties involved are in agreement with your chosen courses and levels.
- **Prior to the end of the year:** Students will receive their schedule and meet with their counselor to review their courses. This is an important time to go over your post-secondary plans and make sure you are on track!
- **Prior to the start of the next school year or semester:** Students are free to make changes to their schedule
- **Within the first five days of a semester:** Students may continue to make adjustments to their schedules
- **After the first five days of a semester:** Students wishing to add or drop a class must fill out an Add/Drop form. Approval for the request will be determined on a case-by-case basis and granted for extenuating circumstances only.
- **Lakes Region Technology Center (LRTC):** Students wishing to drop their LRTC course after 10 days will require a meeting with the Principal and the CTE Student Services Director at LRTC.
- **Year-Long classes & Requests to Withdraw:** Students approved to drop a class at the half-way mark will receive a WP/WF (Withdraw Pass/Withdraw Fail) reflected on their transcript. With the exception of extenuating and pre-approved circumstances, students will not receive credit for withdrawing from a class.

**Course Weightings at Farmington High School**

College/Career Ready	Grade x 1.00
College Preparatory	Grade x 1.05
Honors	Grade x 1.10
Advanced Placement & Running Start	Grade x 1.15

## COURSE LEVELS

- **COLLEGE/CAREER READY (CCR)** These courses are designed to prepare students with the knowledge, skills and work-study practices needed to enter and succeed in post-secondary opportunities – whether college or career.
- **COLLEGE PREPARATORY (CP):** These courses are designed for students who seek admission to two-year or four-year colleges or universities. These courses are taught at a high academic level. CP courses will move at a faster pace, go more in depth, and assess students against rigorous standards. Considerable time and preparation is required on the part of the student.
- **HONORS (H):** These courses are designed for students who seek admission to competitive four-year colleges or universities. Honors courses require that the student has a high academic achievement record and a willingness to work independently outside of school. Students at this level will be asked to go more in depth in the subject matter and will be assessed against rigorous standards.
- **ADVANCED PLACEMENT (AP)/RUNNING START (RS):** Farmington currently offers three Advanced Placement courses and four Running Start courses, all of which provide students with an opportunity to earn both college and high school credit. These are rigorous courses that teach advanced writing skills, problem-solving skills, and study habits to prepare the student for college academics. Students must be willing to commit academically and will be required to push themselves intellectually. Fees will apply for these classes, however funds may be available for those in need so speak with your school counselor about assistance.

## **EXTENDED LEARNING OPPORTUNITIES**

Extended Learning Opportunities (ELO) allow students the ability to acquire knowledge and skills through instruction or study that is outside the traditional classroom methodology. Extended learning opportunities may include, but are not limited to, independent study, private instruction, performing groups, internships, community service, apprenticeships, online courses/distance education, or other opportunities approved by the Principal. The purpose of extended learning opportunities is to provide educational experiences that are meaningful and relevant, and that provide students with opportunities to explore and achieve at high levels. In order to maximize student achievement and meet diverse pathways for learning, this policy permits students to employ extended learning opportunities that are stimulating and intellectually challenging. Extended learning opportunities may be taken for credit or may be taken to supplement regular academic courses. Extended learning opportunities may also be used to fulfill prerequisite requirements for advanced classes. Students wishing to pursue programs of study under these guidelines must first present their proposal to the school's ELO coordinator(s) for approval.

### Types of ELOs varying in rigor and credit potential (lowest to highest):

#### **Service Aide: (Level 1) Attendance and weekly journal – Pass or Fail, .5 Credit potential:**

- ❖ Teacher's Assistant (11<sup>th</sup> and 12<sup>th</sup> grade)
- ❖ Work Study (10<sup>th</sup> – 12<sup>th</sup> grade)
- ❖ Community Service (9<sup>th</sup> – 12<sup>th</sup> grade)
- ❖ School-to-work (Teacher recommendation only 9-12 grade)
- ❖ Career Exploration 101(9th - 12th grade)



**Individual Enrichment: (Level 2)** 9-12 grade (Project Search, Robotics, FHS Movie, Pep Band) – P/F, .5 credit to full credit potential (Special interest teacher in charge and ELO Coordinator to approve credit potential.)

**Advanced Career Exploration: (Level 3)** 10-12 grade – P/F, 1 credit: Research oriented, brief job shadows and interviews. Requires 4 components of Extended Learning Opportunities; Research, Reflection, Product and Presentation.

**Advanced Study: (Level 3)** 11<sup>th</sup>-12<sup>th</sup> grade- students who have exhausted classes in a content area and wish to continue. College Prep / Honors grade scale. Requires 4 components of Extended Learning Opportunities; Research, Reflection, Product and Presentation. Credit to be determined in ELO design

**Internship/Project Based Learning:(Level 4)** 11<sup>th</sup>- 12<sup>th</sup>grade, Deep interest in subject matter. Connections to prior classes/career exploration. Includes a community partner. Final Project or full internship experience. College Prep / Honors grade scale. Requires 4 components of Extended Learning Opportunities; Research, Reflection, Product and Presentation. Credit to be determined in ELO design.

### **CREDIT RECOVERY**

Students are required to recover lost credit through an approved credit recovery process. Options for credit recovery include (but are not limited to):

- Attending a summer school program at a neighboring district (a fee will apply)
- Repeating the course
- A pre-approved ELO
- VLACS class
- Edmentum Recovery class

*\*Students may receive information and applications regarding each program's availability from the guidance department and must meet with their school counselor to develop an action plan.*

### **VLACS**

Virtual Learning Academy Charter School (VLACS) is a fully accredited virtual high school in which students have the opportunity to take courses and earn credit at no additional cost. Students wishing to enroll in a VLACS course must submit their request for approval. Approval is granted if:

- There is a conflict with the student's schedule that prevents them from taking a core course at FHS
- There is a course on VLACS that is not offered at FHS
- The student is taking a course for credit recovery
- The student wants to take a course at a higher level than one taught at FHS

It can take a while to begin a course on VLACS and so students must submit their request for pre-approval at least two weeks prior to the start of the next marking term to ensure there is adequate time to complete the course. Students looking to take a course on VLACS in the fall need to speak with their school counselor prior to summer break to make arrangements. Stop by guidance for details.

## GRADING SYSTEM

Report cards are distributed four times during the school year (specific dates are identified in the Student Handbook). The following system is used:

A = 100 - 90 Excellent (4.0 – 3.5)
B = 89 - 80 Good (3.40 – 2.50)
C = 79 - 70 Average (2.40 – 1.50)
D = 69 - 60 Passing (1.40 - .05)
F = Below 60, Failing (no credit)
P = Pass
WP = Withdraw Passing (no credit)
WF = Withdraw Failing (no credit)
P or F grades do not count in GPA

## ACADEMIC DISTINCTIONS & ADVANCED STUDY OPPORTUNITIES:

Farmington High School currently offers several Advanced Placement and Running Start Courses, which students can take and earn college credit.

Advanced Placement courses include:

AP Language and Composition

AP Literature and Composition

AP World History

Running Start courses are through Great Bay Community College. These include:

College Career Composition

Business Management

Small Business Management

Computer Aided Design

## NH SCHOLARS & THE DIPLOMA WITH DISTINCTION

New Hampshire Scholars is a program that encourages students to take a more rigorous Core Course of Study in high school. Farmington High School's Diploma with Distinction is designed to align with the NH Scholars program of study. NH Scholars offer different pathways within their program including STEM, Art, STEAM and Career. Students should meet with their school counselor to explore these pathways and establish their program of study. Students should read course descriptions to know if a particular class counts towards NH Scholars/ the Diploma with Distinction. For more information on NH Scholars visit <http://www.nhscholars.org>.

## HONOR ROLL

**High Honors** - all grades 90% or better, no incompletes, no withdrawal fails.

**Honors** - all grades 80% or better, no incompletes, no withdrawal fails.

\* Honors and high honors will be recognized through publication. Students enrolled in Pass/Fail courses must pass to be considered eligible for the honor roll.

## NATIONAL HONOR SOCIETY

### Eligibility:

- Must be enrolled in 10th, 11th, or 12th grade and at FHS for at least one semester
- Must have a minimum cumulative grade point average of 88% (3.3)
- Must demonstrate: Character, Scholarship, Leadership, and Service
- Completion of community service hours:
  - 20 hours at the time of application during your sophomore year
  - 30 hours at the time of application during your junior year
  - 40 hours at the time of application during your senior year
- You are *not* eligible if you have failed a course during the previous term
- The selection of members to this NHS chapter shall be by a majority vote of the NHS Faculty Council which consists of faculty members appointed by the advisor(s)

## TESTING PROGRAMS

### Grades 9/10:

- **PSAT 9/10** are required

### Grade 10/11:

- **PSAT/NMSQT** (Preliminary Scholastic Aptitude Test / National Merit Scholarship Qualifying Test) is offered in October each year. It measures verbal and mathematical abilities, and writing skills. This test is used as a practice test for the SAT I (Scholastic Aptitude Test). This test is optional and there is a fee for this test.
- **ASVAB** (Armed Services Vocational Aptitude Battery) is available for interested sophomores and juniors in the fall. It is administered at FHS by the Department of Defense at no cost. This test provides students with valuable information relative to one's strengths in relation to their interests. Personnel from the Career Exploration Program (CEP) review scores with students.

### Grade 11/12:

- **SAT's** are required for all juniors in the spring - these will be given at FHS.
- Seniors may register to take the college entrance exams in the fall of their senior year. This includes SAT I: Reasoning Test, SAT II: Subject Tests, and ACT (American College Test). The school counselors are available to assist with test information and registration. These are offered at specified testing centers and there is a fee required for these exams.
- **Advanced Placement (AP) Exams** - For students taking Advanced Placement courses, students who qualify may have the opportunity to earn advanced placement and/or credit in college. These national exams are offered in May. There is a fee for these exams.
- **ASVAB** (Armed Services Vocational Aptitude Battery) is administered to all seniors at FHS in the fall by the Department of Defense at no cost. This test provides students with valuable information relative to one's strengths in relation to their interests. Personnel from the Career Exploration Program (CEP) review scores with students.

## SPECIAL EDUCATION SERVICES

The Special Education Department at Farmington High School provides specially designed instruction, support, and services to students with an identified disability. The purpose of Special Education is to enable students to successfully develop to their fullest potential by providing a free appropriate public education in compliance with the Individual with Disabilities Education Act. Enrollment in the courses offered by the Special Education Department is by IEP team recommendation.

## **LIBRARY MEDIA CENTER**

The Farmington High School Library offers students and staff a quiet place for reading, studying, and doing research. Our resources are developmentally appropriate and support the FHS curriculum. The librarian regularly weeds out older books to make room for newer print resources – including Young Adult Fiction, Classic Works of Literature, and nonfiction reference materials. All items are catalogued in Destiny, our library resource manager. In addition, patrons have access to the Gale Virtual Reference Library (GVRL) which contains 900 eEncyclopedias and the EBSCO database of scholarly magazine and newspaper articles dating back fifty years. Destiny, GVRL, and EBSCO are all web based and available 24 hours a day from any location in the world on any device with a web browser. All patrons are given user names and passwords to access these quality resources; quick links can be found on the library website at [fhs.sau61.org/library](https://fhs.sau61.org/library). All resources can be used for both course related research as well as personal development. Students are encouraged to share access to all library resources with their families. Farmington High School students and staff are eligible for free library cards at Goodwin Library located on Main Street in the Farmington town center. Having a Goodwin card enables FHS patrons to access a vast statewide, interlibrary loan system and download eBooks from the NH State Library. Every effort is made to meet the resource requests of FHS students and staff.

Students visit the library with their teachers and can be scheduled here during REAL blocks. The library is open from 7:30 am to 3:00 pm, five days a week. Lessons woven into the FHS curriculum will help to inform students about important 21<sup>st</sup> century media literacy. During freshmen orientation, new students learn the layout of the physical space and are introduced to the print and online resources. In the next few weeks they visit the library with English teachers to discuss plagiarism and MLA citation skills. Across the curriculum students will be working on research projects and honing their skills in terms of evaluating the credibility of sources; practicing the ethical use of information and information technology; digging deeper to find unbiased, quality resources; formulating thesis statements; and revising drafts. Students pick out books of interest to read as part of silent sustained reading time in English classes. Over their four years, the FHS library will be an important part of their educational experience.

## **CAREER TECHNICAL EDUCATION**

**Career and Technical Education (CTE)** courses are offered through the cooperation of Lakes Region Technology Center and provide each student with job entry-level skills for students who want to be trained in a trade or business area, as well as preparation for further training in a chosen field or college major. The complete CTE program of studies is available following the FHS course selections.

**Enrolling in a program at LRTC is a wonderful opportunity for students to take advantage of, however spots are limited. We only want students who are serious and willing to make the commitment to apply. Your school counselors will review a variety of factors in determining eligibility for programs with a lot of interest. Please keep in mind that all LRTC courses are, at minimum, taken at the college preparatory level.**

**Eligible students should be able to answer YES to the following questions:**

- **Have you visited LRTC either through the group tour, individual visit, or both?**
- **Have you turned in your application to guidance?**
- **Do you have an acceptable attendance record (No more than 5 unexcused absences)?**
- **Does your behavior demonstrate responsibility and maturity?**
- **Are you in good academic standing/not behind in credits?**
- **Are you willing to put in the work? LRTC courses are all college preparatory level classes at a minimum**

\* Students are cautioned that there may be scheduling conflicts involved in registering for a CTE program. Course offerings are subject to change.

\*\***The Health Science Program** is a very rigorous, honors level program. A separate criteria will be used in determining which students will be admitted to this program. See your school counselor for more information.

### Career Pathways – NH Department of Education

In accordance with the New Hampshire Department of Education, Bureau of Career Development, Farmington High School has developed four-year plans of study for each of the 16 career clusters. Career clusters function as a useful guide in developing individual student plans and bridging secondary and postsecondary curriculum for a complete range of career options. As such, it helps students discover their interests and their passions, and empowers them to choose the educational pathway that can lead to success in high school, college and career. Please note, the sixteen plans of study are broad and foundational for each cluster. Depending on your educational and career goals, the courses in these four-year plans are subject to change. Therefore, it's important to meet with your counselor so plans of study can be individualized to meet your needs.

### High School Plan of Study – Agriculture, Food & Natural Resource

*This Career Cluster focuses on the production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources. There are seven career pathways in this cluster:*

- **Agribusiness Systems**
- **Animal Systems**
- **Environmental Service Systems**
- **Food Products & Processing Systems**
- **Natural Resources Systems**
- **Plant Systems**
- **Power, Structural & Technical Systems**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra 1 Integrated Math I	Geometry Integrated Math II	Algebra 2 Integrated Math III	Pre-Calc/Calculus Trigonometry Statistics
Physical/Earth Science	Biology	Chemistry	<i>*Dependent on pathway- see academic career related below</i>
Geography	American Gov.	US History	World History Economics
<b>Career related: Technical</b>	<b>Career related: Academic</b>		<b>School-to-Career connections and/or recommended background</b>
Agricultural Science	Business Management Small Business Management Personal Finance Anatomy & Physiology Environment Science Freshwater Ecology		Leadership Communication Information technology Experiential Learning Mentorship

	Animal Behavior & Terrestrial Ecology	
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### High School Plan of Study- *Architecture & Construction*

Careers in designing, planning, managing, building and maintaining the built environment. There are three career pathways in this cluster:

- **Design/Pre-Construction Pathway**
- **Construction Pathway**
- **Maintenance/Operations Pathway**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra I Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Pre-Calc/Calculus Statistics Trigonometry Math for the Trades
Freshman Science	Biology	Chemistry	Elective
Geography	American Gov. Psychology	US History Economics	World History
<b>Career related: Technical</b>		<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>
Construction Trades		Art Classes Metalsmithing Intro to Mass Media and Journalism Computer Aided Design	Technical Writing Record Keeping Work-based experiences Internship/mentorships

### High School Plan of Study – *Hospitality & Tourism*

Hospitality and tourism encompasses the management, marketing and operations of restaurants and food/beverage services, lodging, attractions, recreation events and other travel related services. There are four different career pathways in this cluster:

- **Restaurants & Food/Beverage Services**
- **Lodging**
- **Travel & Tourism**
- **Recreation, Amusement & Attractions**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Stats or Trigonometry Accounting
Freshman Science	Biology	Chemistry	Elective
Geography	American Government	Economics Psychology	World History

<b>Career related: Technical</b>	<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>
Hospitality Management Culinary Arts Agricultural Science	Basic Foods Small Business Management Sociology	Part-time work Internships College visits Teamwork Leadership Communications

### High School Plan of Study – *Human Services*

The Human Services cluster relates to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services. This cluster has five different career pathways:

- **Early Childhood Development & Services**
- **Counseling & Mental Health Services**
- **Family & Community Services**
- **Personal Care Services**
- **Consumer Services**

<b>9<sup>th</sup> Grade</b>	<b>10<sup>th</sup> Grade</b>	<b>11<sup>th</sup> Grade</b>	<b>12<sup>th</sup> Grade</b>
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Stats/Trig Pre-Calc/Calculus
Freshman Science	Biology	Chemistry	A&P or elective
Geography	American Gov.	US History Economics	World History Psychology Sociology
<b>Career related: Technical</b>	<b>Career related: Academic</b>		<b>School-to-Career connections and/or recommended background</b>
Careers in Education Health Science & Technology	Business Management Small Business Management Accounting		Internships College Visits Youth Leadership Part-time work

### High School Plan of Study – *Information Technology*

The information technology focuses on preparing students for careers in the ever evolving technology industry. There are three different pathways within this career cluster:

- **Computer maintenance and repair**
- **Computer programming**
- **Computer systems and networking**

<b>9<sup>th</sup> Grade</b>	<b>10<sup>th</sup> Grade</b>	<b>11<sup>th</sup> Grade</b>	<b>12<sup>th</sup> Grade</b>
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English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Pre-Calc Trig Integrated Math III	Pre-Calc/Calculus Trig Physics
Freshman Science	Biology	Chemistry	Elective
Geography	American Gov.	US History	World History Economics
<b>Career related: Technical</b>		<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>
Computer Network Systems I Computer Network Systems II		Information Technology	Internships Web Design ELO College visits Cisco Academy IT Certification

### High School Plan of Study – Law, Public Safety & Security

The (LPSS) Law, Public Safety, and Security Cluster focuses on preparing students for careers in the LPSS industry. The cluster includes coursework in such areas as criminology, legal studies, forensics, and psychology. The LPSS cluster includes five different pathways:

- Correction Services
- Emergency & Fire Management
- Law Enforcement Services
- Legal Services
- Security & Protective Services

<b>9<sup>th</sup> Grade</b>	<b>10<sup>th</sup> Grade</b>	<b>11<sup>th</sup> Grade</b>	<b>12<sup>th</sup> Grade</b>
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math III	Algebra II Integrated Math III	Pre-Calc/Calculus Trigonometry Statistics
Freshman Science	Biology	Chemistry	Elective
Geography Sociology	American Government	US History Economics	Psychology Criminal & Family Law
<b>Career related: Technical</b>	<b>Career related: Academic</b>		<b>School-to-Career connections and/or recommended background</b>
N/A	Sociology Inside the Criminal Mind Intro to Mass Media & Journalism College & Career Composition		Informational interviews Job Shadowing/Internships Police/Fire Explorers Work-based learning

### High School Plan of Study – Manufacturing

The manufacturing career cluster consists of careers around planning, managing, and performing the processing of materials into intermediate or final products. It individuals to provide professional and



technical support in carrying out these activities. Manufacturing is a diverse cluster with six different pathways:

- **Production**
- **Manufacturing Production Process Development**
- **Maintenance, Installation and Repair**
- **Quality Assurance**
- **Logistics and Inventory Control**
- **Health Safety and Environmental Assurance**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Pre-Calc/Calculus Trigonometry / Statistics Math for the Trades
Freshman Science	Biology	Chemistry	Physics Elective
Geography	American Gov.	US History Economics	World History
<b>Career related: Technical</b>		<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>
Precision Manufacturing Construction Trades Auto Technology Collision Technology		Some STEM courses (depending on pathway) Environmental Science Earth's Dynamic Systems	Information interviews Job Shadowing LRTC program certifications

### High School Plan of Study – *Marketing, Sales & Services*

The marketing, sales & services cluster focuses on planning, managing and performing marketing activities. Students interested in this cluster should learn about purchasing, financing, distribution, pricing, risk management, promotion, selling and marketing information. There are five different career pathways in this cluster:

- **Marketing Management**
- **Professional Sales**
- **Merchandising**
- **Marketing Communications**
- **Marketing Research**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Pre-Calc/Calculus Trigonometry Statistics
Freshman Science	Biology	Chemistry	Elective
Geography	American Gov.	US History Economics	World History Psychology

<b>Related career: Technical</b>	<b>Related career: Academic</b>	<b>School-to-Career connections and/or recommended background</b>
Marketing Education Graphic Design	Business Management Small Business Management Sociology Intro to Mass Media and Journalism	Part-time work Internships Job Shadowing

### High School Plan of Study – *Science, Technology, Engineering & Math*

The STEM career cluster involves planning, managing and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services. This cluster is divided into two pathways:

- **Engineering & Technology**
- **Science & Math**

<b>9<sup>th</sup> Grade</b>	<b>10<sup>th</sup> Grade</b>	<b>11<sup>th</sup> Grade</b>	<b>12<sup>th</sup> Grade</b>
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Pre-Calc Integrated Math III	Calculus Trigonometry Statistics
Freshman Science	Biology	Chemistry	*Dependent on pathway
Geography	American Gov.	US History	Economics World History
<b>Career related: Technical</b>	<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>	
Computer Network Systems Precision Manufacturing Technology	Advanced Math courses Advanced Science courses *dependent on pathway Intro to STEAM Intro to Arduino Computer Aided Design	Mentorship Work History Volunteering Job Shadowing	

### High School Plan of Study – *Transportation, Distribution & Logistics*

The Transportation, Distribution & Logistics career cluster involves, planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance. There are seven different career pathways in this cluster:

- **Facility & Mobile Equipment Maintenance**
- **Health, Safety & Environmental Management**
- **Logistics Planning & Management services**
- **Sales & Service**
- **Transportation Operations**
- **Transportation Systems/Infrastructure Planning, Management & Regulation**
- **Warehousing & Distribution Center Operations**

<b>9<sup>th</sup> Grade</b>	<b>10<sup>th</sup> Grade</b>	<b>11<sup>th</sup> Grade</b>	<b>12<sup>th</sup> Grade</b>
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English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Pre-Calc Trigonometry Statistics Math for the Trades
Freshman Science	Biology	Chemistry	Electives
Geography	American Gov.	US History	World History Economics
<b>Career related: Technical</b>		<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>
Auto Technology Collision Technology		Business Management Intro to Mass Media and Journalism Environmental Science	Leadership Communication Information technology Experiential Learning

### High School Plan of Study – Arts, Audio/Video Technology & Communications

*Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services. There are six different career pathways in this cluster:*

- **A/V Technology & Film Career Pathway**
- **Printing Technology Career Pathway**
- **Visual Arts Career Pathway**
- **Performing Arts Career Pathway**
- **Journalism & Broadcasting Career Pathway**
- **Telecommunications Career Pathway**

<b>9<sup>th</sup> Grade</b>	<b>10<sup>th</sup> Grade</b>	<b>11<sup>th</sup> Grade</b>	<b>12<sup>th</sup> Grade</b>
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Pre-Calc/Calculus Trigonometry Statistics
Freshman Science	Biology	Chemistry	Physics
Geography	American Gov.	US History Psychology	World History Economics
<b>Career related: Technical</b>		<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>
Graphic Design Theater & Stagecraft Multimedia Communications		Intro to Mass Media & Journalism Video Production I & II Yearbook Intro to Digital Arts	Record Keeping Work-based experiences Extracurricular opportunities/ELO/TA opportunities

### High School Plan of Study – Business, Management & Administration

Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. There are five different career pathways in this cluster:

- **General Management Pathway**
- **Business Information Management Pathway**
- **Human Resources Management Pathway**
- **Operations Management Pathway**
- **Administrative Support Pathway**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Pre-Calc/Calculus Trigonometry Statistics
Freshman Science	Biology	Chemistry	Elective
Geography	American Gov. Business Management	US History Psychology	World History Economics
<b>Career related: Technical</b>	<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>	
*Dependent on pathway	Intro to Mass Media and Journalism Accounting Small Business Management Marketing Modern Communications	Record Keeping Work-based experiences Leadership/teamwork/communication Internships Organizational skills	

### High School Plan of Study – Education & Training

Careers in Education and Training involve planning, managing and providing education and training services, and related learning support services. There are three different career pathways in this cluster:

- **Administration & Administrative Support Pathway**
- **Professional Support Services Pathway**
- **Teaching/Training Pathway**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Probability & Statistics
Freshman Science	Biology	Chemistry	Elective
Geography	American Gov. Sociology	US History Psychology	World History Economics
<b>Career related: Technical</b>	<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>	

Careers in Education	Intro to Mass Media and Journalism Modern Communications	Record Keeping Work-based experiences Leadership/teamwork/communication Internships/Job Shadow
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### High School Plan of Study – *Finance*

Careers in planning, services for financial and investment planning, banking, insurance, and business financial management. There are five different career pathways in this cluster:

- **Securities & Investments Pathway**
- **Business Finance Pathway**
- **Accounting Pathway**
- **Insurance Pathway**
- **Banking Services Pathway**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Pre-Calc/Calculus Statistics Trigonometry
Freshman Science	Biology	Chemistry	Elective
Geography	American Gov.	US History Psychology	World History Economics
<b>Career related: Technical</b>	<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>	
*Dependent on pathway	Accounting Personal Finance	Record Keeping Work-based experiences	

### High School Plan of Study – *Government & Public Administration*

Careers in planning and performing government functions at the local, state and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations. There are seven different career pathways in this cluster:

- **Governance Pathway**
- **National Security Pathway**
- **Foreign Service Pathway**
- **Planning Pathway**
- **Revenue & Taxation**
- **Regulation Pathway**
- **Public Management & Administration Pathway**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Pre-Calc/Calculus Statistics

			Trigonometry
Freshman Science	Biology	Chemistry	Elective
Geography Sociology	American Gov. Criminal Law	US History Psychology	World History Economics
<b>Career related: Technical</b>	<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>	
*Dependent on pathway	Intro to Mass Media & Journalism Accounting Foreign Language	Record Keeping Work-based experiences Internships Student Government	

### High School Plan of Study – *Health Science*

Careers in planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development. There are five different career pathways in this cluster:

- **Therapeutic Services Pathway**
- **Diagnostic Services Pathway**
- **Health Informatics Pathway**
- **Support Services Pathway**
- **Biotechnology Research & Development Pathway**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 or Equivalent	English 10 or Equivalent	English 11 or Equivalent	English 12 or Equivalent
Algebra Integrated Math I	Geometry Integrated Math II	Algebra II Integrated Math III	Pre-Calc/Calculus Statistics Trigonometry
Freshman Science	Biology	Chemistry	Anatomy & Physiology
Geography	American Gov. Sociology	US History Psychology	World History Economics
<b>Career related: Technical</b>	<b>Career related: Academic</b>	<b>School-to-Career connections and/or recommended background</b>	
Health Science Technology	Intro Sports Medicine Advanced Chemistry	Record Keeping Work-based experiences Internships CPR/First Aid	

## 2020-2021 COURSE DESCRIPTIONS

### English Department

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The State of New Hampshire and Farmington High School requires that every student must secure four (4) credits in English toward earning a diploma. The curriculum at Farmington High School aligns with the NH State Language Arts Frameworks, Common Core Standards, and 21st Century Learning Skills.

With the exception of Applied English and Advanced Placement courses, all courses in English are designed to be semester-long (worth one credit each) with a focus on the continued development of reading and/or writing skills. Students are required to successfully complete a specific number of these focused courses by the time they graduate, as is outlined below.

<b>Graduation requirements for Standard Diploma and Diploma with Distinction</b>
Freshman Seminar One reading-focused course One writing-focused course One elective course
<i>*Students enrolled in Advanced Placement, Pre-AP, or Running Start courses will meet the requirements of both reading and writing-focused courses.</i>

**Please note: Students must be enrolled in at least one English course per academic year.**

### UNDERCLASSMEN (GRADES 9 AND 10) OVERVIEW

Courses offered to underclassmen are designed to help students build on the foundations needed to be successful at the upper level. Reading-focused courses are thematically structured and will provide students with opportunities to explore their growing awareness of the world and their role within it. Students will learn to actively read a text and engage in the close-reading process in order to build on their critical thinking and analytical skills as well as practice the different styles of writing: personal narrative, expository, persuasive, and analytical. As well, students will work to establish context in their reading and understand how history, society, and culture influence the creation of a text, but also are reflected in a text. Writing-focused courses will provide students with practice writing in a variety of different forms while providing opportunities to explore and establish their own voice through a variety of creative and analytical assessments, while also building a growing awareness of audience. Additionally, students will be introduced to the research process and the library, as well as the MLA Style Guide. Students placed into Applied English are exempt from these requirements.

### READING AND WRITING FUNDAMENTALS

**1 Credit**

**CRN: 157CCR**

**Prerequisite:** *Team Recommendation*

This course is for students who need extra support with the fundamentals of reading and writing. Classes will be kept small to allow for more individual attention and will be co-taught. Students will read and comprehend literature and nonfiction literature with frequent checks for understanding and other forms of scaffolding in order to develop confidence and independence. We will read short stories and longer novels

as a class; Students will also read self-selected texts. Reading instruction will be taught in congruence with this reading using a structured reading program. Students will be supported at their reading level in a variety of ways including but not limited to; phonemic awareness, fluency, exploration of the morphology and etymology of words. Students will also write for a range of tasks, purposes, and audiences with the help of explicit modeling and mentor texts. Writing assignments will be broken down into clear steps to help students organize their thoughts and develop their ideas effectively. Conferencing will take place on a regular basis to help students develop the abilities to make decisions about what to do next with their writing and layer in new skills to produce increasingly complex pieces. We will focus on planning, drafting, revising, and editing as students compose narratives, persuasive pieces, and responses to literature. Students will engage in small and large group discussions regularly to strengthen speaking and listening skills. We will cover a variety of grammar topics in context. Students will also participate in multiple assessments per semester to assess student ability for reading comprehension and fluency.

***\*This course meets the Freshman Seminar requirement***

### **FRESHMAN SEMINAR**

**1 Credit**

**CRN: 111CCR, 111CP, 111H**

This is a mandatory course for all incoming freshmen. The first part of the course will focus on the reinforcement of grammar usage, mechanics, and vocabulary, but the main focus will be on the introduction of the various forms of writing: narrative, expository, persuasive, and literary analysis. Each unit will provide students with an overview of the basics of the specific style of writing and will give students opportunities to practice these writing skills through a series of formative assessments using inquiry, research, and analysis. A summative assessment will be completed at the end of each unit and needs to be submitted in order to meet the necessary requirements to continue on to English elective courses.

### **THE HERO'S JOURNEY (Reading-Focused Course)**

**1 Credit**

**CRN: 112CCR, 112CP, 112H**

This course will explore the “hero’s journey,” as described by Joseph Campbell. This pattern of literature has developed throughout history, while maintaining its popularity and strength. Students will study the form of the epic, as well as other forms of fiction, poetry, drama, and film. Students will be expected to write analytically about a variety of literary elements such as plot development, setting, characterization, theme, in addition to examining language and style. Students will be expected to complete a variety of writing assessments that are formal and informal as well as other forms of assessments through the use of analysis and creative expression. Students will also study subject-appropriate vocabulary and grammar. Possible readings may include: *The Odyssey*, *The Iliad*, *The Power of Myth*, *Harry Potter*, *The Alchemist*, *The Hunger Games*, and *The Hobbit*.

### **COMING OF AGE (Reading-Focused Course)**

**1 Credit**

**CRN: 113CCR, 113CP, 113H**

This course will explore various thematic concepts of the developments and experiences that occur when moving from adolescence to adulthood, including a focus on family and relationships and the harm toxic relationships can cause. Students will be expected to complete a variety of writing assignments that are formal and informal as well as other forms of assessments through the use of analysis and creative expression. Students will also study subject-appropriate vocabulary and grammar. Possible readings may include: *Speak*, *Sula*, *The House on Mango Street*, *The Adventures of Huckleberry Finn*, *Catcher in the Rye*, *To Kill a Mockingbird*, *Romeo and Juliet*, and *The Bean Trees*.

### **DRAMA AND POETRY (Reading-Focused Course)**

**1 Credit**

**CRN: 100CCR, 100CP, 100H**



This course is an introduction to reading and interpreting poetry and drama through analysis of basic literary elements. Students will learn, through close reading and paraphrase, to identify the subject matter, speaker, and situation of a poem, as well as dramatic elements such as dialogue, space, and theme to establish an analysis of a play. Students will be expected to complete a variety of writing assessments that are formal and informal as well as other forms of assessments through the use of analysis and creative expression. Students will also study subject-appropriate vocabulary and grammar. Possible readings will include a selection of plays and poetry ranging from Greek antiquity to American Modernism.

**CREATIVE WRITING (Writing-Focused Course)**

**1 Credit**

**CRN: 132CCR, 132CP, 132H**

This course will focus on different aspects of the fiction side of creative writing, such as the short story, poetry, and drama. Students will be asked to read and analyze texts from those genres as well as create their own examples through the use of creative expression. These works will form a portfolio that students will submit at the end of the semester. Students will be expected to complete a variety of writing assessments that are formal and informal as well as other forms of assessments through inquiry, research, analysis, and creative expression. Students will be expected to use the Writing Process intensively to focus on their writing skills. Students will also study subject-appropriate vocabulary and grammar. Possible readings may include: *Models for Writers*, Aesop's Fables, and Fairy Tales and Mythology Across the World.

**PRE-AP ENGLISH**

**2 Credits**

**CRN: 118H**

**Prerequisite:** *Successful completion of one Freshman English Credit (including Freshman Seminar), sophomore standing with an 80% or higher in previous English courses, and teacher recommendation.*

The Pre-Advanced Placement (Pre-AP) English course gives students the opportunity to improve and practice skills that will enable them to be successful in AP classes (upperclassmen). Pre-AP will expose students to the type of activities and expectations required by the AP program, foster organizational skills and study habits, and also lay the groundwork and foundation for success in college coursework. A heavy focus will be placed on inquiry, research, analysis, and creative expression. Since this course has greater reading and writing expectations than standard courses, all students enrolled will be placed at the honors level. Successful completion of Pre-AP English is a partial requirement for entry into AP Placement courses. Possible readings may include: *“Allegory of the Cave,” Slaughterhouse Five, The Great Gatsby, and Death of a Salesman.*

**APPLIED ENGLISH (UNDERCLASSMEN) Year long class**

**1 Credit**

**CRN: 100AE1**

**Prerequisite:** *By IEP Team Recommendation Only*

This course is designed for special education students to improve reading fluency, comprehension, vocabulary, spelling, and the writing process. Students will also learn about the employment application and the interview process by using mixed media, so that students may gain skills necessary to function in today's world. Students will also practice executive functioning skills such as organization, planning and time management to increase independence.

**UPPERCLASSMEN (GRADES 11 AND 12) OVERVIEW**

Upperclassmen courses are designed to cover course-specific competencies relating to the thematic focus of the elective course as well as reinforce English Department competencies adapted directly from the Common Core State Standards (CCSS) for the English/Language Arts (ELA). Each course is divided into two sections: the case study and the independent portfolio. During the case study, students experience opportunities to explore the series of competencies through teacher-directed engagement and a series of

formative and summative assessments. The second half of the course then requires students to develop their own curriculum by selecting a series of texts and assessments that will help students to demonstrate proficiency in all competency categories. During this stage, teachers will advise and guide students through the process as a way of fostering 21st Century Learning Skills and College and Career Readiness Standards.

## **ADVANCED PLACEMENT ENGLISH OVERVIEW**

All Advanced Placement courses are designed to simulate the rigor, challenges, and curriculum of a college course. These courses are designed to help students prepare for the College Board's Advanced Placement English exams. Students who score well on these national exams can earn advanced placement and/or credit at the college level. **There is a fee for the AP Exam and participation in the exam is a mandatory requirement for all students enrolled in the course. A waiver for part of the fee is available for students in financial need.**

### **AP LITERATURE AND COMPOSITION**

**2 Credits**

**CRN: 104**

**Prerequisite:** *A good standing with an 80% or higher in previous English courses, successful completion of the Pre-AP course or equivalent, and a teacher recommendation.*

This course requires students to engage in the close reading and analysis of fiction, poetry, and drama. Emphasis is placed on students broadening their abilities to read and interpret difficult texts by considering how authors use thematic and linguistic elements to convey meaning. The course focuses on examples of British and American works from the 16th century to the present day and is intended to provide students with opportunities to build on their familiarity of canonical works. The course is reading and writing intensive with expectations of reading texts independently as well as both in-class and outside of class analytical writing with opportunities to receive feedback and rewrite material. There will be a focus on research and analysis. When applicable, AP rubrics will be used. Possible readings may include: *The Turn of the Screw*, *Heart of Darkness*, *The Awakening*, *Hamlet*, and *As I Lay Dying*. **PLEASE NOTE:** *This course is offered in school years ending in an odd number, starting with 2018-2019.*

### **AP LANGUAGE AND COMPOSITION**

**2 Credits**

**CRN: 104AP** - *Prerequisite: A good standing with an 80% or higher in previous English courses, successful completion of the Pre-AP course or equivalent, and a teacher recommendation.*

This course requires students to engage in the close reading and analysis of nonfiction, fiction, and drama. Emphasis is placed on students broadening their abilities to read and interpret difficult texts by considering how authors make use of rhetoric to persuade and inform an audience. The course focuses on a variety of examples of essays, speeches, drama, visual texts and is intended to provide students with opportunities to familiarize themselves with the application and manipulation of a variety of linguistic elements within a text. The course is reading and writing intensive with expectations of reading texts independently as well as both in-class and outside of class analytical writing with opportunities to receive feedback and rewrite material. There will be a focus on inquiry and research. When applicable, AP rubrics will be used. Possible readings may include: *Thank You For Arguing*, *Julius Caesar*, *The Importance of Being Earnest*, and *Pygmalion*. **PLEASE NOTE:** *This course is offered in school years ending in an even number, starting with 2019-2020.*

### **AMERICAN LITERATURE (Reading-Focused Course)**

**1 Credit**

**CRN: 107CCR, 107CP, 107H**

This course is designed to focus on the establishment and evolution of American Literature within the history of the United States. Texts will be chosen as representative of the continued progress of American themes as they manifested and developed throughout history. There will be a focus on analysis and research, as students will analyze fiction, nonfiction, poetry, and drama within this historical context and will support

their interpretations through secondary materials while paying particular attention to textual evidence, analysis, MLA formatting, and reinforcing research methods. Possible readings may include: *Leaves of Grass*, *The Scarlet Letter*, *The Grapes of Wrath*, *The Great Gatsby*, and *A Raisin in the Sun*.

**BRITISH LITERATURE (Reading-Focused Course)**

**1 Credit**

**CRN: 102CCR, 102CP, 102H**

This course is designed as a basic survey of British Literature ranging from the Anglo-Saxon period to the Contemporary period. Texts will be chosen as representative of the continued progress of British themes as they manifested and developed throughout history. There will be a focus on analysis and research, as students will analyze fiction, poetry, and drama within this historical context and will support their interpretations through secondary materials while paying particular attention to textual evidence, analysis, MLA formatting, and reinforcing research methods. Possible readings may include: *Beowulf*, *Paradise Lost*, and *Frankenstein*. **PLEASE NOTE:** This course is offered in school years ending in an even number, starting with 2019-2020.

**WORLD LITERATURE (Reading-Focused Course)**

**1 Credit**

**CRN: 106CCR, 106CP, 106H**

This course is designed to introduce students to literature from parts of the world that are not traditionally covered in the English curriculum. Emphasis will be placed on texts in translations and parts of the non-Western world. Students will be exposed to different, non-Western approaches to the world and begin to recognize their role in a globalized 21st century world. There will be a focus on analysis and research, as students will analyze fiction, poetry, and drama as well as learn about the culture and history of the particular part of the world that is represented in the text while supporting their interpretations through secondary materials, textual evidence, analysis, MLA formatting, and reinforcing research methods. Possible readings may include: *Wide Sargasso Sea*, *The Tempest*, *Interpreter of Maladies*, and “*Master Harold*” ...and the Boys. **PLEASE NOTE:** This course is offered in school years ending in an odd number, starting with 2018-2019.

**COLLEGE COMPOSITION (Writing-Focused Course)**

**1 Credit**

**CRN: 120H**

**Prerequisite:** Successful completion of two English credits.

Through this course, students may receive credit from Great Bay Community College, which can be transferred to numerous colleges and universities. In this course, students learn to write clearly and effectively for defined audiences through a variety of strategies focused on preparing students to write and communicate at the collegiate level. Emphasis is on the writing process, from drafting through pre-writing, revision, and editing. This course places reading at the core of the writing curriculum by including interaction with reading selections as the vehicle for idea development, analytical and interpretive skill, and research, and to serve as writing models. There will be a focus on inquiry, research, analysis, and creative expression.

**ADVANCED CREATIVE WRITING (Writing-Focused Course)**

**1 Credit**

**CRN: 134CCR, 134CP, 134H**

**Prerequisite:** Successful completion of two English credits (one of which must be creative writing). This course is designed for students who successfully completed the Creative Writing course and are serious about continuing to develop their craft. As an advanced course, students should expect a heavy amount of creative writing, with new material shown at least once a week. The course is an extension of the work completed in the previous course and students will focus on analyzing examples and creating samples of short stories, poetry, and personal narratives. Students will be expected to participate in workshops, conferences, and the creation of a portfolio. The class will also study and work to publish a literary magazine

either in print or online and each student is also expected to submit their work to outside publications. There will be a focus on inquiry and creative expression. Possible readings may include: *Alice's Adventures in Wonderland*, *Models for Writers*, and *Freedom Writers*.

**INTRO TO MASS MEDIA AND JOURNALISM (Writing-Focused Course) 1 Credit**  
**CRN: 103CCR, 103CP, 103H**

**Prerequisite:** *Successful completion of two English credits.*

This course will serve as an introduction to mass media and journalism. It is designed to enhance critical reading, writing, and research skills by enhancing media literacy through the use of critical questions and media deconstruction. Students will explore the impact of media on human behavior, communication and ethics. Additionally, students will study the mechanics, functions, and purpose of journalism in the 21st Century. Students will refine critical and analytical thinking through the practice of researching, interviewing, and reporting. Students will be responsible for participating in class discussions, writing news articles for publication, writing analytical papers, and creating individual and collaborative culminating projects. While this is a writing intensive course, there will be ample reading of informational texts and mentor texts.

**MODERN COMMUNICATIONS (Elective) 1 Credit**  
**CRN: 119CP, 119H**

**Prerequisite:** *Successful completion of two English credits.*

The course is designed to focus on preparing students to write and communicate at the collegiate level. Students will work on professional writings, college essays, SAT preparation, and other application materials. Also, students will focus on creating a professional portfolio and presence, including social media and an online persona. Students will be asked to read nonfiction accounts, articles, and essays that center on the transition from high school to college, college to the workforce, and life after college. Students will learn how to make some of these transitions in order to help them enter the professional world. Also, students may be asked to meet with people from different backgrounds/careers and interview them. Other requirements may include a job shadow and college visit, as well as a major presentation as a final grade.

**STUDIES OF THE UNKNOWN (Writing-Focused Course) 1 Credit**  
**CRN: 108CCR, 108CP, 108H**

**Prerequisite:** *Successful completion of two English credits.*

In this course, students will study urban legends, supernatural events, conspiracy theories, ancient and modern-day folklore and traditions from around the world, and unsolved mysteries. Students will spend some time analyzing stories, articles, and other accounts of strange happenings from various cultures and societies. Students will discover how these stories and accounts help create and develop a culture, and how those cultures influence other cultures. There will be a heavy focus on writing, as students will write a research paper covering various topics of study, as well as write their own versions of content covered in class. Topics of study include, but are not limited to: ghost stories, various urban legends, alien encounters, mythological creatures, and general unsolved mysteries. There will be a focus on research and creative expression, as students will spend time researching various unexplained mysteries of the world and expressing their knowledge in multiple writing formats. Possible readings include those of HP Lovecraft, Edgar Allan Poe, Alvin Schwartz, and Stephen King.

**PSYCHOLOGY AND LITERATURE (Elective) 1 Credit**  
**CRN: 121CCR, 121CP, 121H**

**Prerequisite:** *Successful completion of two English credits.*

This course is designed to give students experience in the thematic analysis of literary texts and film in terms of their psychological themes, such as the nature of the self, the unconscious, the self and family, identity, and alienation. One goal of the course will be to help students articulate various psychological theories and their relation to literature and experience. Students will also develop a fuller understanding of the human condition by exploring a range of best-selling fiction that represents our current culture. Additionally, students will examine a variety of literary elements focusing on theme and language and how these devices reinforce meaning within a text. Research methods will be reinforced and used to build on analytical writing skills. There will be a focus on inquiry and analysis. Possible readings may include: *The Curious Incident of the Dog in the Night-Time*, *A Child Called "It"*, *The Five People You Meet in Heaven*, *Tuesdays with Morrie*, and *It's Kind of a Funny Story*.

**FILM AND LITERATURE (Elective)**

**1 Credit**

**CRN: 136CCR, 136CP, 136H**

**Prerequisite:** *Successful completion of two English credits.*

This course is intended to introduce students to the world of film. Students will study various genres and elements of film and analyze how those two sections of film study work together to make a film successful. Additionally, students will spend some time studying characters and themes of various films and applying those to the overall meaning of the film. This course is meant to sharpen students' reading, writing, and listening skills, as students will not only watch films, but write various critiques on those films and discuss in class what made the film successful or unsuccessful. Students will be expected to watch films outside of class and to use the writing process extensively in all writing assignments. There will be a focus on research and analysis. Units of study include theme, characterization, adaptive theory, genre study, and film element study.

**INSIDE THE CRIMINAL MIND (Elective)**

**1 Credit**

**CRN: 110CCR, 110CP, 110H**

**Prerequisite:** *Successful completion of two English credits.*

In this course, students will explore various situations in which characters and true-life people have had to commit some of the most heinous crimes. Students will read and analyze a variety of texts, including court cases, mysteries, short stories, and novels covering crimes and the motives behind them. Students will discuss motivations for crimes committed, analyze and debate the current justice system, and compose their own accounts of crimes and mysteries. Students will be responsible for completing multiple writing projects, including responses to cases discussed in class, research-based papers, and a final culminating paper in which students have the opportunity to reflect on course content. Topics of study include, but are not limited to: crimes of the seven deadly sins, celebrity crimes, serial killers, cults, cyber-crimes, and social justice crimes. There will be a focus on research, analysis, and inquiry. Possible readings include those of Edgar Allan Poe, Roald Dahl, and true-life crime accounts.

**SHAKESPEARE IN FILM (Elective)**

**1 Credit**

**CRN: 100SFCCR, 100SFCEP, 100SFH**

**Prerequisite:** *Successful completion of two English credits.*

Shakespeare in Film is a semester-long course designed to introduce students of any academic level to the plays of William Shakespeare through the various film adaptations of them. Plays will be introduced through modern adaptations, followed by guided readings of the texts, then finally the viewing of one or more traditional films of said play. The course will cover some or all of the plays: *The Taming of the Shrew*, *Twelfth Night*, *Othello*, *King Lear*, *Macbeth*, and *Hamlet*.

**APPLIED ENGLISH (UPPERCLASSMEN) Year long class**

**1 Credit**

**CRN: 100AE1**

**Prerequisite:** *By IEP Team Recommendation Only*

This course is designed for special education students to improve reading fluency, comprehension, vocabulary, spelling, and the writing process. As upperclassmen, students will be working towards gaining employment. Students will learn how to look for, apply and interview for employment, through experiences in class and in the community. Students will explore the community they live in and begin working or seeing what work looks like through job shadows or other experiences.

**Mathematics Department**

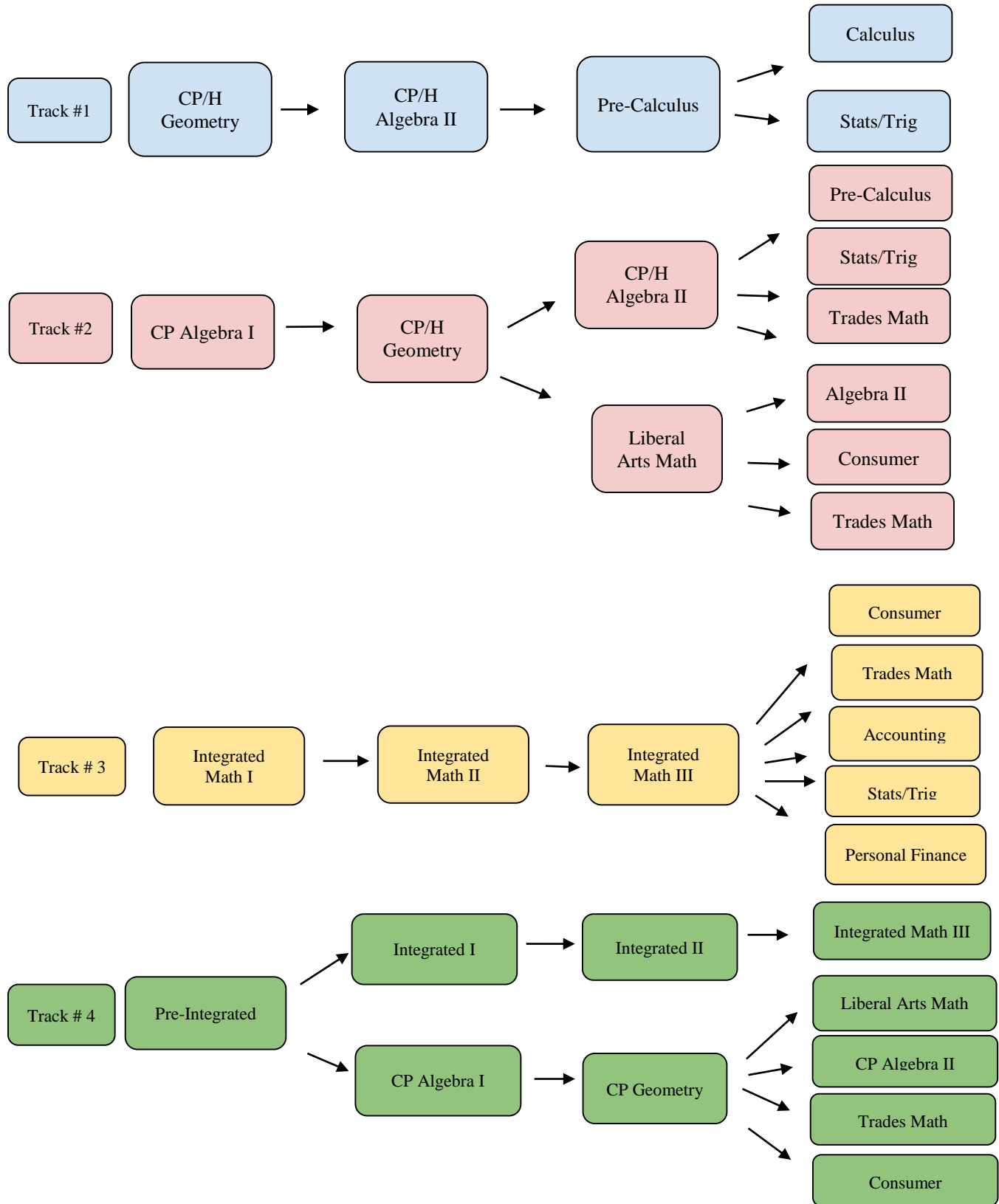
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The State of New Hampshire and Farmington High School require that every student must complete four years of math, including a full credit in Algebra toward earning a diploma. The fourth year of math may be a credit in mathematics or a class considered a mathematics intensive course. The curriculum at Farmington High School aligns with the NH State Frameworks, Common Core Standards, and 21st Century Learning Skills.

Recognizing that the needs of our students are different and varied, the math department offers varied levels of courses that are designed to provide for the student’s individual needs. Mathematics facilitates the understanding of other subject matter such as science, technology and economics. Incoming freshmen are placed into classes based upon a math placement test and the eighth grade teacher recommendation which will include academic effort, grades, and standardized tests. The intent is to ensure that students are challenged and successful with their high school math experiences.

<b>GRADUATION REQUIREMENTS</b>			
<b>General Diploma</b>	<b>3 Credits + Math</b>	<b>FHS Diploma with Distinction</b>	<b>4</b>
<b>Intensive</b>		<b>Credits</b>	
Algebra I		Algebra I	
Geometry		Geometry	
Elective		Algebra II	
Elective - Math/Math Intensive		Elective - *see course selections	
-OR-			
Integrated Math I			
Integrated Math II			
Integrated Math III			
Elective - Math/Math Intensive			
<i>*Students who follow the integrated math track will have covered through Algebra I and Geometry by the time they have finished Integrated Math II.</i>		<i>*Eighth graders placed in Geometry their freshman year do not need to take Algebra I, but will need to complete Algebra II.</i>	

# 4-Year Mathematics Program of Study



**PRE- INTEGRATED MATH 1****CRN: 301AIM****1 Credit****Prerequisite:** *Recommendation by 8th or 9th grade teacher*

This course is for those students who will benefit by reinforcement of math skills while developing a foundation in basic algebra, geometry, and problem solving that will be needed in future math courses. Topics include variables, algebraic expressions, integers, solving equations and inequalities, factors, fractions, exponents, ratio and proportion, percents, measurement, area, and volume.

**INTEGRATED MATH 1****1 Credit****CRN: 311CCR**

This course is for students to develop an understanding of linear relationships and models. It will also develop a knowledge and ability to use variables, algebraic expressions, integers, equations and inequalities, factors, fractions, exponents, ratio and proportion, percents, measurement, area, and volume. Geometric properties and theorems and congruent figures will be used to extend understanding from prior math. The course will apply this knowledge by tying algebraic and geometric ideas together.

**INTEGRATED MATH 2****1 Credit****CRN: 302IM****Prerequisite:** *Successful completion of Integrated Math II*

This course is taken after successfully completing Integrated Math 1. There will be an emphasis on quadratic equations. Rational, real and complex numbers will all be explored for solving quadratic equations. Probability and data will be used to make mathematical decisions and evaluations. Right triangle trigonometry, Pythagorean relationships and circles will also be explored throughout this course.

**CP ALGEBRA 1****CRN: 310CP****1 Credit**

This course reinforces operations with real number expressions, solving multi-step one variable equations, and working with ratios. Students will then be introduced to the concept of linear “slope” and will learn to identify, write, solve, and graph linear equations (including parallel and perpendicular lines) and compound inequalities as well as solving systems of equations and inequalities. Students will also learn to solve absolute value functions. Students explore linear systems of equations and inequalities, properties of exponents, matrices, and polynomials. The polynomials studied include exponential functions and a focus on quadratic equations, which incorporate factoring. Finally, students will explore properties of exponents and polynomials. Successful completion of this course prepares a student for Geometry.

**CP/H GEOMETRY****CRN: 320CP, 320H****1 Credit****Prerequisite:** *Successful completion of Algebra 1 or recommendation by 8th grade Math Teacher*

In this course, students will employ their algebra skills along with visual representations and proofs to identify congruence and concurrency as they apply properties of angles, lines, parallel lines, perpendicular lines, and triangles. Students will explore topics such as properties of quadrilaterals, polygon similarity, and the transformation properties of polygons. Students will examine right triangles with an introduction to trigonometry and properties associated with circles. Students will examine real world problems involving length, perimeter, area and volume. Successful completion of this course prepares a student for Algebra 2. The honors level should be recommended by a teacher and is designed for the student who is willing to commit to a demanding workload.



**CP/H ALGEBRA 2****CRN: 330CP, 330H****1 Credit****Prerequisite:** *Successful completion of Geometry*

In this course, students will explore properties of exponents, radical expressions, polynomials, exponential functions, factoring, and quadratic equations and be introduced to imaginary and complex numbers. Students will explore radical, exponential, rational and logarithmic functions and be introduced to trigonometric ratios and functions. Students will be expected to interpret graphs and apply mathematical concepts to solve real-world problems. Students will be introduced to graphing calculators. Students will explore radical, exponential, rational and logarithmic functions, trigonometric equations, ratios, functions, identities and graphs. The honors level should be recommended by a teacher and is designed for the student who is willing to commit to a demanding workload. The honors level is designed to prepare students for Pre-calculus. Students will explore parabolas, hyperbolas and conic sections. Students will then examine trigonometric identities and equations. A great deal of independent study is expected. Graphing calculators are used extensively.

**\*Distinction/Scholars Math****LIBERAL ARTS MATH****1 Credit****Grades 10-12****CRN: 358CCR -****Prerequisite:** Geometry

The fundamental purpose of this course is to formalize and extend the mathematical concepts learned in Algebra 1 and Geometry while better preparing students for Algebra 2. Through direct instruction along with application, students will deepen their understanding of linear and exponential relationships while engaging in methods for analyzing, solving, and applying quadratic functions. Students will delve into similarity, three dimensional measurements, statistics, and simple / compound interest. The course will enable students to experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**CONSUMER MATH****1 Credit****Grades 11 - 12****CRN: 355CCR****Prerequisite:** *Successful completion of two math credits*

This is the most useful math class students will ever take. In this class you will be planning for the future while earning a math credit. We will look at the finances of getting a job, going to college, buying a car, buying a house, paying your taxes, saving and investing etc. Every student will be able to apply the lessons learned in this math class to the common knowledge required for successful money management in real life.

**MATHEMATICS FOR THE TRADES****1 Credit****Grades 11 - 12****CRN: 360CCR****Prerequisite:** *Successful completion of Geometry or Integrated Math III*

This course will provide students with functional math skills specifically for the trades such as electrical, automotive, plumbing, allied health, and construction trades. The math concepts are presented completely within the context of practical on-the-job applications, making the math tangible and relevant.

**PRE-CALCULUS (Honors Level)****1 Credit****Grades 11 - 12****CRN: 310H****Prerequisite:** *Successful completion of Algebra 2*

This course is designed for those students who plan to take Calculus in the future. This course exposes the student to complex problem solving. Topics include a brief review of exponential and logarithmic functions and their graphs, a complete derivation of the trigonometric functions, identities and formulas, and circular functions. Also included are limits and sequences, matrices and their inverses, maxima and minima problems, along with an introduction to differential and integral calculus. Graphing calculators are used extensively.

**\*Distinction/Scholars Math****CALCULUS (Honors Level) Year-long class****2 Credits****Grade 12****CRN: 343HYL****Prerequisite:** *Successful completion of Pre-calculus*

In this course, students will explore single variable calculus, limits, basic derivatives and integration rules; the first and second derivative test as they are applied to the elementary functions (does not include trigonometric functions). Students will do curve sketching as a means of understanding the material and applied rate and area problems. A great deal of independent study will be required.

**\*Distinction/Scholars Math****\*\*Students taking this class will be required to take the AP Calculus AB exam. A fee will apply.****INTRODUCTION TO STATISTICS & TRIGONOMETRY****1 Credit****Grades 11 - 12****CRN: 340H****Prerequisite:** *Successful completion of CP or Honors Algebra 2*

This course is designed for students who plan to continue their mathematical education beyond high school in fields that require a strong mathematical background. This course includes an introduction to parametric statistics. Students will learn about normal distribution, the Central Line Theorem, the one-sample t-test, and how to design their own study. After a review of basic trigonometric functions, students will delve into, as well as apply concepts, in the areas of analytic trigonometry, laws of sine and cosine, vectors in the plane, vectors and dot products along with the trigonometric form of complex numbers. Graphing calculators are used extensively and the pace of this course will require more independent study on part of the student.

**\*Distinction/Scholars Math****APPLIED MATH****CRN: 100AM****1 Credit****Prerequisite:** *By IEP Team Recommendation only*

This course is designed for special education students to provide logical, sequential development of the arithmetic of whole numbers, fractions, decimals, and percent within the context of situations that are familiar to students. Each unit will focus on specific calculations within a theme related to real world situations. This course can be taken all four years if it is needed.

## Science Department

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The Science Department's multi-level curriculum has been designed to provide a sequential program of studies which recognizes student needs to prepare for future education as well as entering the work field. To meet this goal, the curriculum addresses the need for the student to think critically, solve problems resourcefully, analyze and access information and to read, write and speak effectively.

GRADUATION REQUIREMENTS			
General Diploma Credits	3	FHS Diploma with Distinction Credits	4
Physical/Earth Science Biology Elective		Physical Earth Science Biology Chemistry Elective - *see course offerings	

### PHYSICAL/EARTH SCIENCE

**1 Credit**

#### Required 9th Grade Class

**CRN: 400CCR, 400CP, 400H**

The first half of this course will investigate the physical world of matter and energy and their interactions. The focus of the course will be the laboratory experience and problem solving of scientific questions. Material presented will have real life application. Students will be given maximum opportunity for direct participation in discovering and developing many basic concepts in measurement, forms of energy, and chemistry of matter. Course topics will include measuring, graphing and the metric system, scientific method, forms of energy, and the physical and chemical properties of matter. The second half of this course provides an overview of space systems and physical & historical geology. Students will begin by investigating current theories that describe the origin of the Universe and the Solar System. Students will learn about the life cycle of stars, solar processes and how those processes affect the Earth as well as the behavior of our solar system's planets. Students will learn about the structure of the solid Earth, the vast extent of geologic time, and the unifying Theory of Plate Tectonics. Students will learn about the rock cycle, which describes the materials that make up the Earth and the internal and external processes that create and change them. In the laboratory, students will learn how to identify common minerals and the three types of rocks, as well as investigate the processes that control their formation. Course expectations include lab report writing and a commitment to work outside the class.

### BIOLOGY

**1 Credit**

**CRN: 401CCR, 401CP, 401H**

**Prerequisite:** *Successful completion of Physical / Earth Science.*

Biology covers major topics such as energy in organisms and environments, relationships in ecosystems, natural selection, evolution, structures and functions, inheritance, and trait variations. Key concepts focused on will include how organisms use and obtain their energy requirements as well as how that energy moves through the environment. Additional focus will center on the structure and function of cells, hierarchical systems of organisms, specialized cell functions, DNA and chromosome relationships, and how traits are passed onto future generations. Students will understand how organisms interact with their living and nonliving environment as well as how biodiversity affects ecosystems and humans. Factors that cause

natural selection and evolution of species including how traits are distributed through populations will also be covered. Students will be able to explain genetic inheritance and environmental causes of gene mutations and expression. Students will obtain this knowledge by making mathematical comparisons, using models, applying statistics, analyzing data, conducting investigations, and applying scientific reasoning.

### **SCIENCE ELECTIVES:**

#### **ENVIRONMENTAL SCIENCE**

**1 Credit**

**CRN: 406CCR, 406CP**

**Prerequisite:** *Physical/Earth Science & Biology*

This course focuses on human interactions with Earth's geological and environmental systems and learning about the foundations of sustainable living. We will be analyzing environmental issues involving pollution, global climate change and natural resources and looking at how humans depend on Earth's resources by examining case studies and exploring solutions within FHS, New Hampshire and beyond. Units are designed to encourage creativity, using reasoning skills and analytical thinking focusing on interactions between air, land and water quality and how we can minimize the human footprint. This course may involve outdoor fieldwork which requires proper dress. There will be projects assigned based on STEM (Science, Technology, Engineering and Mathematics) learning quarterly along with a weekly current event on articles summarizing and relevant to the study of environmental sciences. Students must have the ability to independently carry out assignments in and outside the classroom setting.

#### **INTRODUCTION TO FORENSIC SCIENCE:**

**1 Credit**

**Grades 11 - 12**

**CRN: 410CCR**

**Prerequisite:** *Physical/Earth Science & Biology*

This class is an introduction to the science behind crime scene investigations. An emphasis will be placed on the chemistry, physics and biology used to investigate various criminal activities. Topics to be covered will include: identification of physical evidence, fingerprint analysis, microscopy in hair, fibers, and pollen analysis, questioned document analysis, and overall crime scene investigation techniques. Class periods will be primarily lab oriented with lecture, guest lectures, group projects, and class discussion. Students will participate in a comprehensive evaluation of current developments in research, instrumentation, and laboratory technology. Students will be exposed to levels of instrumentation including microscopy. Assessment of student work will be based on homework, laboratory analysis, tests, and projects.

#### **EARTH'S DYNAMIC SYSTEMS**

**1 Credit**

**CRN: 411CCR, 411CP**

**Prerequisite:** *Physical/Earth Science & Biology*

Welcome to Earth's Dynamic Systems - The study of the world around you. The following course will provide an overview of Earth's systems (to include the hydrosphere, atmosphere, geosphere and biosphere), Historical Geology (evolution of life and the planet), and Atmosphere (focusing on the characteristics of the atmosphere, water and wind, weather and climate). This course will use hands-on experimentation, activities, and direct instruction. This course will show how Earth Science is relevant in everyday life. Students must provide the willingness to learn, and participate in the Science Fair by completing a science fair project using the Scientific Method.

#### **FRESHWATER ECOLOGY**

**1 Credit**

**CRN: 413CCR, 413CP, 413H**

*Note: This course is only offered during the fall semester*

**Prerequisite:** *Physical/Earth Science & Biology*

Freshwater Ecology is the study of organisms in relation to the environmental conditions of freshwater ecosystems. Students will investigate, collect data and report on the physical, chemical, and biological components of these complex ecological systems. This course will be taught through a combination of hands-on lab work, multiple field trips to local freshwater bodies and lecture. **\*Distinction/Scholars**

**Science if taken at Honors level**

**ANIMAL BEHAVIOR & TERRESTRIAL ECOLOGY:****1 Credit****CRN: 414CCR, 414CP, 414H**

*Note: This course is only offered during the spring semester*

**Prerequisite:** *Physical/Earth Science & Biology*

Students will explore through lecture, laboratory work and field work the natural processes and phenomena of organisms in both the winter and spring environments as well as the evolutionary and ecological pressures that shape the behavior of animals. Students will engage in a hands on animal behavior project (training a small animal) as well as participating in outdoor investigations of the local environment.

**\*Distinction/Scholars Science if taken at Honors level**

**ANATOMY AND PHYSIOLOGY****1 Credit****CRN: 404CP**

**Prerequisite:** *Physical/Earth Science & Biology*

This course is designed for students who plan to broaden their experiences in biology or a health related careers. The course focuses entirely on the human body. Topics include the history of biomedical science, body organization and reference systems, systems theory, cells and tissues, an in-depth study of the structure and function of the major organ systems of the human body, disease and the health care system. Lecture, discussion, anatomical coloring exercises, group work, lab work, use of anatomical models and dissection are some of the learning approaches used.

**\*Distinction/Scholars Science**

**CP CHEMISTRY****1 Credit****CRN: 403CP**

*Note: This course is only offered during the fall semester*

**Prerequisite:** *Physical/Earth Science & Biology*

This course deals with the fundamental relationships of matter and energy and how those relationships affect students' daily lives. Students will explore our current understanding of the model of the atom, how ionic and molecular compounds behave, calculations involving many different types of reactions, behavior involving the ideal gas law, and intermolecular attractive forces of liquids and solids. This course is designed to promote abstract thinking and solid math and problem solving skills. Some lab work and independent research will be required.

**\*Distinction/Scholars Science**

**ADVANCED CHEMISTRY****1 Credit****CRN: 403AC**

*Note: This course is only offered during the spring semester*

**Prerequisite:** *Physical/Earth Science, Biology & Chemistry*

See CP Chemistry description. The Advanced Placement Chemistry course is designed to simulate the rigor, challenges, and curriculum of a college course. In this course we will cover oxidation/reduction reactions,

acid-base reactions, equilibrium law, reaction rate law, and expansion in ideal gas law behavior. This course is designed to promote abstract thinking and solid math and problem solving skills. Some lab work and independent research will be required.

**\*Distinction/Scholars Science**

**PHYSICS**

**1 Credit**

**Grade 12**

**CRN: 405H**

*Note: This course is only offered during the fall semester*

**Prerequisite:** *Algebra I, Geometry, Algebra II, & CP Chemistry*

Physics is an honor’s laboratory course dealing with such topics as motion, force, energy, momentum, wave theory, sound, light, electricity & electronics, magnetism, relativity and String Theory. Problem solving and strong math skills will be developed as well as an ability to think and work independently. Labs are a required part of this course.

**\*Distinction/Scholars Science**

**\*\*This course qualifies as a math intensive course**

**Social Studies Department**

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GRADUATION REQUIREMENTS	
General Diploma:	FHS Diploma with distinction:
Geography & World Cultures or World History American Government United States History Economics	American Government United States History Economics World History

**GEOGRAPHY & WORLD CULTURES**

**1 Credit**

**Grades 9 & 10**

**CRN: 204CCR, 204CP**

This course is designed to survey a variety of topics within the field of geography. The course will cover the physical and human geography of Latin America, the Middle East, Africa, Asia, Europe and Oceania. Studies will include but not be limited to physical, cultural, political and economic geography. There will be a strong emphasis on interpretive and analytical skills dealing with graphics, maps, and charts, including topography, demographics, climate and regional issues. Term research projects, papers and class presentations will be required for students taking this course at the college prep level. This course fulfills the state Geography requirement for graduation.

**AMERICAN GOVERNMENT**

**1 Credit**

**Grade 9 (CP only) 10 (CCR or CP)**

**CRN: 200CCR, 200CP**

This course is the study of the roots of democracy and constitutional government. Students will examine the historical roots of the American government. The US Constitution and the amendments to the

Constitution will be studied in-depth. Students will analyze the powers of the branches and how they check and balance each other. The power and structure of New Hampshire's government will also be studied.

## **UNITED STATES HISTORY**

**1 Credit**

### **Grade 11**

**CRN: 201CCR, 201CP**

**Prerequisite:** *American Government*

US History is the study of the growth and influence of the United States from the 1890's under President McKinley's administration to the present. The course is one of a journey through history requiring students to analyze historical events and to formulate opinions and views based on investigative research. Readings, research, primary sources, films and alternative resources will be utilized. Lectures, discussions, position papers and other activities will be incorporated to better prepare students for college. Current events will be discussed and evaluated throughout the year.

## **PRE-AP UNITED STATES HISTORY**

**2 Credits**

### **Grade 11**

**CRN: 201AP**

**Prerequisite:** *CP American Government with an 85% or higher and teacher recommendation. Grade 11.*

The Pre-Advanced Placement (Pre-AP) US History course gives students the opportunity to improve and practice skills that will enable them to be successful in the AP World History class. Pre-AP will expose students to the type of activities and expectations required by the AP program, foster organizational skills and study habits, and also lay the groundwork and foundation for success in college coursework. See description of course above. ***Summer reading and extensive course reading is required for students taking this course at the Pre-AP level.***

## **ECONOMICS**

**1 Credit**

### **Grades 11 – 12**

**CRN: 200CCR, 200CP**

**Prerequisite:** *American Government*

This course will examine and analyze the process in which people seek to satisfy their needs and wants by making decisions. The course will focus on how the stock market operates and affects the country, impact of government policy (taxes, spending,) on the economy. The class analyzes market structure and business organization. The changing world of international commerce and e-commerce are also studied. The pace of this course at the CP level will require more independent study on the part of the student and there will be supplemental readings at the advanced levels as well.

## **WORLD HISTORY 1- S1 Only**

**1 Credit**

### **Grade 12**

**CRN: 203CP, 203H**

**Prerequisite:** *CP or Pre-AP US History*

World History is a survey of the roots of civilization from the start of civilization in the Ancient Near East to the dynamic nations of Europe, Asia, Americas and Africa. This course covers world history from 10,000 BCE to the fall of Rome. Large themes such as trade, technology and interaction among societies and empires will be the focus as students perform the work of historians, including analyzing documents, looking at how societies change over time, and making comparisons among civilizations. Students will also explore the impact of Greek and Roman culture on society. Through investigative research, students will

have the opportunity to evaluate history and the events, theories and individuals that shaped it. This course fulfills the state Geography/World History requirement for graduation.

### **WORLD HISTORY 2 - S2 Only**

**1 Credit**

**Grade 12**

**CRN: 203S2CP, 203S2H**

**Prerequisite:** *CP or Pre-AP US History*

World History is a survey of the roots of civilization from the start of civilization in the Ancient Near East to the dynamic nations of Europe, Asia, Americas and Africa. This course covers world history from the Crusades to today. Large themes such as trade, technology and interaction among societies and empires will be the focus as students perform the work of historians, including analyzing documents, looking at how societies change over time, and making comparisons among civilizations. Students will also explore the achievements of man during the Renaissance and the Scientific Revolution. Students will analyze the pros and cons of events as diverse as the French Revolution and the Industrial Revolution. Through investigative research, students will have the opportunity to evaluate history and the events, theories and individuals that shaped it. This course fulfills the state Geography/World History requirement for graduation.

### **ADVANCED PLACEMENT WORLD HISTORY - Year long class**

**2 Credits**

**Grade 12**

**CRN: 203AP**

**Prerequisite:** *CP or Pre-AP US History with an 80% or higher & teacher recommendation,*

This course requires a level of commitment and organization that would be expected in any college class. The purpose of AP World History is to develop a greater understanding of the evolution of global processes and contacts in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences as well as comparisons among major societies. AP World History also builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. A significant amount of reading and writing is required. This course fulfills the state Geography/World History requirement for graduation. There is a fee for the AP Exam and participation in the exam is a mandatory requirement for all students enrolled in the course. A waiver for part of the fee is available for students in financial need. **Note: *Summer reading and extensive course reading is required for students taking this course at the AP level.***

### **CRIMINAL LAW**

**Grades 10 – 12**

**1 Credit**

**CRN: 208CCR, 208CP, 208H**

This course is the study of criminal law and the American legal system. This course studies the various court systems and their jurisdiction of criminal, civil and family cases. This will include the New Hampshire courts as well as the Federal court system. This class will study the criminal justice process from trial through sentencing. It will help students gain an understanding of how law affects their lives. Curriculum is based on legal debates, mock trials and culminates in a field trip to the Strafford County Courthouse and Correctional Facility. Taking this course at the college prep or honors level will provide students with the ability to analyze and evaluate legal disputes. Lectures, debates, position papers and research will be incorporated to better prepare students for college.



**PSYCHOLOGY****Grades 10 – 12****1 Credit****CRN: 209CP, 209H**

This course begins with a look at the founders of psychology and the methods used to examine behavioral and mental processes. Students will study the workings and structure of the brain along with perceptions, sensations and memory. Students will explore their sources of stress and better ways of coping with stressors in their daily lives. Other areas to be studied include: lifespan development, psychological disorders and their treatments, altered states of consciousness and personality traits and theories.

**SOCIOLOGY****Grades 10 – 12****1 Credit****CRN: 210CCR, 210CP, 210H**

Sociology concentrates on the study of the structure and function of society including culture, social structure and groups, deviance and social control, and social inequalities of race, gender, ethnicity and age, population and urbanization and the social institutions of family, education, religion, medicine, politics, and the media. The class will focus on issues in America and abroad that oppress people. The class will actively engage students while emphasizing respectful expression and evaluation of diverse points of view. Through research and discussion, students will improve their critical and evaluative thinking skills. This elective incorporates lecture, research, individual and group activities, homework and class presentations. Students will actively use collected articles, documentaries, movies, and technology as their sources of information. The class will not use a textbook. \* **Students who have already taken and passed Social Justice Studies should not sign up for this class.**

**Foreign Language Department**

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GRADUATION REQUIREMENTS	
<b>General Diploma</b>	<b>FHS Diploma with Distinction</b> <b>2 Credits</b>
No requirements	French I & II or Spanish I & II  A third year of Foreign language is recommended

**FRENCH I****Grades 9 – 12****1 Credit****CRN: 500CCR**

Students will explore and begin to learn conversational vocabulary and grammar that can be used in everyday communication. Students will begin to develop the four language skills of listening, speaking, reading and writing. Students will also start their exploration of the culture of French-speaking countries.

**FRENCH II****Grades 9 – 12****1 Credit****CRN: 501CP****Prerequisite:** *Successful completion of French I*

Students will build upon their knowledge of French as they master the present tense and expand their conversational skills to include past and future events. Students will continue to focus on all four language skills as they talk about their daily routine, travel, and similar practical vocabulary.

**FRENCH III** **1 Credit**  
**Grades 10 – 12**  
**CRN: 502CP**

**Prerequisite:** *Successful completion of French II*

Students will increase their knowledge of Francophone culture through readings in the target language. Students will continue their exploration of vocabulary and grammatical structures as they begin to talk about hypothetical situations. Emphasis will continue to be placed on all four language skills.

**FRENCH IV** **1 Credit**  
**Grade 11 - 12**  
**CRN: 503CP**

**Prerequisite:** *Successful completion of French III*

In this final year of French, students will round out their cultural and historical understanding of the French speaking world. More advanced grammar is included at this level. Communication in the target language will continue to be the primary focus.

**SPANISH I** **1 Credit**  
**Grades 9 – 12**  
**CRN: 505CCR**

Students will explore and learn basic vocabulary and grammar that can be used in everyday communication. Students will begin to develop all four language skills: listening, speaking, reading and writing. Students will also start their exploration of the Hispanic world.

**SPANISH II** **1 Credit**  
**Grades 9 – 12**  
**CRN: 506CP**

**Prerequisite:** *Successful completion of Spanish I*

Students will build upon their knowledge of Spanish as they master the present tense and expand their conversation into past and future events. Students will continue to focus on all four language skills as they talk about their daily routine, train travel and their childhoods.

**SPANISH III** **1 Credit**  
**Grades 10 – 12**  
**CRN: 507CP**

**Prerequisite:** *Successful completion of Spanish II*

Students will increase their knowledge of Hispanic culture and history through readings in the target language. Students will continue their exploration of grammatical structures as they begin to talk about hypothetical situations. Literary selections by recognized Hispanic authors will be incorporated into our study. Emphasis will continue to be placed on all four language skills. Students cannot sign up to take Spanish III and IV the same year.

**SPANISH IV**  
**Grade 11 - 12**  
**CRN: 508CP**

**1 Credit**

**Prerequisite:** *Successful completion of Spanish III*

In this final year of Spanish students will round out their cultural and historical understanding of the Spanish speaking world. More advanced grammar and syntax will be explored as we work to develop each student's communicative language. Select literary works, both excerpts and full texts, by recognized Hispanic authors will also be introduced. Students cannot sign up to take Spanish III and IV the same year.

**HISPANIC CULTURES THROUGH FILM**

**1 Credit**

**Grade 9 – 12**  
**CRN: 509CCR**

Hispanic Culture through Film is a course that explores the diverse culture of the Hispanic world through film. Students will explore the themes of sports, immigration, music, political conflict/war, family, Hispanic culture in the US, poverty and animal/human rights through various films from Hispanic countries.

**Art Department**

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<b>Graduation requirements for Standard Diploma and Diploma with Distinction</b>
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One credit in Art or Music <i>*Students going for the NH Scholars with an Art or STEAM distinction require two credits</i>
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**ART I**  
**Grades 9 – 12**  
**CRN: 850CCR**

**1 Credit**

This is an intro-level course and is offered to the student who would like to continue with art at the high school level. Students will explore the elements of art and principles of design while creating projects designed around each topic. This is a hands on course where students will develop skill and have the opportunity to try many different mediums which include, drawing, painting, and sculpture.

**ART II**  
**Grades 10 – 12**  
**CRN: 851CCR**

**1 Credit**

**Prerequisite:** *Successful completion of Art I*

This course is for the student who wishes to further their art career at a more advanced level. Students will study the many types of drawing and painting, as well as printmaking through time. Students will create their own projects after each art movement is studied, using that for inspiration. Students will become more involved in critiquing, analyzing, and discussing their own artwork and that of others. This course will give students a chance to develop individual interests and strengths.

**ART III** **1 Credit**  
**Grades 11 – 12**  
**CRN: 854CP**

**Prerequisite:** *Successful completion of Art II*

Students will focus on using dry mediums to express a variety of topics such as the human figure, portraits, observational, and much more. Students will then work with all types of paint and have time to develop their skill in one specific paint medium. Students will work with a variety of topics such as observational, landscapes, portraits, and much more. Students are given a lot of choice and freedom during this course in order to develop their own personal style. Students in this course are serious artists who are self-motivated and willing to try new things and refine their skills while developing their own personal style.

**ART IV** **1 Credit**  
**Grades 11 – 12**  
**CRN: 856CP**

**Prerequisite:** *Successful completion of Art III*

Students in this course should be serious artists who may even consider attending an art school in the future. Students will use a variety of media to produce a required number of works of art. This course will focus on creating a portfolio for submission to an art school. Students will have the freedom to explore what they wish, create their own projects based on personal interest, and really work on developing their own personal style.

**CERAMICS** **1 Credit**  
**Grades 10 – 12**  
**CRN: 870CCR**

Ceramics is a course in which students will explore a broad range of techniques and approaches to art through hand built and wheel thrown clay. Students will learn to approach ceramic artwork as both functional and decorative. Development of technical skill and artistic vocabulary will be introduced and used on a daily basis. There are endless possibilities with clay and students should feel free to try new things and create works of art based off of their personal interests.

**ADVANCED CERAMICS** **1 Credit**  
**Grades 10 – 12**  
**CRN: 870CP**

**Prerequisite:** *Successful completion of Ceramics*

This is an upper level class designed for students who like to further their exploration of hand-building and wheel throwing. Students taking this course should be self-motivated and willing to further their understanding of ceramics as a means of artistic expression. Students will make connections to art history **Grades 9 – 12** and apply advanced techniques and processes. They will also refine their skills and deal with more complex forms.

**JEWELRY DESIGN** **1 Credit**  
**Grades 9 – 12**  
**CRN: STEAM2CCR**

Students will use base metals, (copper, brass etc.), to hand create jewelry and other small adornment using hand tools like pliers, jeweler's saws and hammers. Good hand/eye coordination is needed as well as attention to detail and safety, for this course. This course will also incorporate **sketching** designs beforehand, to choose which ones are worth creating so students should feel comfortable working on paper as well as with their hands. Upon completion of this course students will be able to design and hand make their own jewelry creations from hanging earrings to chains and pendants!

**ADVANCED JEWELRY DESIGN****1 Credit****Grades 9 – 12****CRN: STEAM4CCR****Prerequisite:** *Jewelry Design*

Students will continue their exploration of base metals and will use new processes like; forging, hand-formed chains, soldering, chainmail/Japanese chain mesh and cuttlefish casting, (if possible). Students that enjoy making jewelry and that maintained a B average or better, with jewelry design, can sign up for this advanced class.

**ADVANCED II JEWELRY DESIGN****1 Credit****Grades 10 – 12****CRN: STEAM5CCR****Prerequisite:** *Advanced Jewelry Design,*

Students will advance their jewelry and metalsmithing skills even further with this class. Projects to be made include; advanced clasps, die forming, enameling, stone setting, soldering wire forms etc. and students will also learn about pricing their work. New tools will also be used like the rolling mill, punches and press! Students that enjoy making advanced jewelry and that maintained a B average or better, with advanced jewelry design, can sign up for this advanced class.

**Business Education Department**

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**ACCOUNTING I****1 Credit****Grades 11 – 12****CRN: 606CCR, 606CP****This course will satisfy a math intensive requirement**

The objective of this course is to provide an introduction to the basic concepts and standards in the financial accounting systems. The course emphasizes the construction of the basic financial accounting statements, the income statement, balance sheet, and cash flow statement - as well as their interpretation.

The course is taught through lectures, and class collaboration (student engagement).

**BUSINESS MANAGEMENT****1 Credit****CRN: 611DE****Grades 11- 12 (\*Grade 10 with teacher recommendation)**

The objective of this course is designed to help students understand strategic planning and decision making; leadership and motivation in the workplace; human resources; payroll; and various best practices of successful management. **This course is a college level course through Great Bay Community College.** Students who earn an 85% or above will earn college credit as well as high school credit.

*\*This course is only offered first semester*

**SMALL BUSINESS MANAGEMENT****1 Credit****Grades 11 – 12 ( \*Grade 10 with teacher recommendation)****CRN: 61DE****Prerequisite:** *Business Management*

The objective of this course is designed to teach students how to think and act as an entrepreneur. Students will learn how to start-up and operate a business while in school with the topics covered: Business Plans, Sales, Inventory, Human Resources, Growing your business; and Social/Ethical Responsibility. This course

is a college level course through Great Bay Community College. Students who earn an 85% or above will earn college credit as well as high school credit.

*\*This course is only offered second semester*

*\*\*FKA Entrepreneurship*

## **PERSONAL FINANCE**

**1 Credit**

**Grades 11 – 12( \*Grade 10 with teacher recommendation)**

**CRN: 612CCR**

**This course will satisfy a math intensive requirement**

The objective of this course is designed to help students understand the impact of individual choices on career goals and future earnings potential. Topics covered will include income, money management, stocks, financial literacy, debit and credit, as well as saving and investing.

## **Family & Consumer Sciences Department**

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## **FOODS & NUTRITION**

**1 Credit**

**Grades 9 – 12**

**CRN: 807FN**

This course is ideal for students who have little or no experience working in a kitchen. They will investigate the many exciting aspects of food selection & preparation. Emphasis will be placed on kitchen safety, sanitation, nutritional content & food preparation methods. Students will work in groups.

## **WORLD CUISINE**

**1 Credit**

**Grades 9 – 12**

**CRN: 802WC**

**Prerequisite:** *Successful completion of Foods & Nutrition or participation in a vocational foods program.*

Study world cultures through food preparation, tasting, and exploring. Explore the world through food. There are so many amazing cuisines in the world that we have little or no exposure to and this will be a great start. Learn to cook using recipes compiled from all different cultures. In addition to food we will be looking at the cultures and customs.

## **LIVING ON YOUR OWN**

**1 Credit**

**Grades 11 & 12**

**CRN: 803CCR**

This course offers students the opportunity to develop skills necessary for living on their own after high school. Students will consider how personal goals, community involvement, and personal and professional relationships affect their future. In addition to exploring resources available, students will learn the skills needed to solve problems and be savvy consumers in order to live comfortably and independently. Students will demonstrate decision making in the management of the essentials of daily living, housing, food, clothing, and transportation.

## **INTRODUCTION TO FAMILY STUDIES**

**1 Credit**

**Grades 11 & 12**

**CRN: 809CCR**

This course is perfect for anyone who may become a parent or wants to work with children. We will investigate stages of child growth and development ranging from prenatal to adolescence. We will address family dynamics and parenting styles as well. Creative projects on various stages of child development will be a large part of this course.

**Health, Wellness & Physical Education**

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<b>Graduation requirements for Standard Diploma and Diploma with Distinction</b>
1 credit of Physical Education 1 credit of Wellness

**COED PHYSICAL EDUCATION 1 Credit**  
**Grades 9 – 12**  
**CRN: 900CCR**

Physical Education offers a variety of individual and team oriented sports, fitness/wellness activities, and games to meet program goals. There are several program goals. The first is the development of knowledge and attitudes important in achieving and maintaining the highest level of fitness and wellness. Another goal involves the development of values and appropriate social behavior such as cooperation, leadership, sportsmanship, and self-responsibility. Also included are the development and understanding of movement skills in sports and other physical activities through participation and analysis.

**ADAPTIVE PHYSICAL EDUCATION 1 Credit**  
**Grades 9 – 12**  
**CRN: 903CCR**

**Prerequisite:** *Teacher/IEP team recommendation*

This class provides an excellent opportunity for students to participate in physical activity together. In this course regular education students will be paired with special education students to collaborate on physical activities. Activities included will be fitness, weight room, sports and team building games. Students will work together on improving skill levels within each activity.

**\* This class fulfills the PE credit requirement.**

**WELLNESS 1 Credit**  
**Grades 9 – 12**  
**CRN: 402CCR**

This course is required for high school graduation. Students will embark on a wellness journey that encompasses many relevant topics with the emphasis on informed decision making. Topics include, but are not limited to: personal wellness, stress management, nutrition concepts, substance abuse, safety and first aid, mental health and human sexuality. The class is a discussion based lead with activities to re-emphasize what is being taught and discussed.

**WELLNESS FOR LIFE 1 Credit**  
**Grades 9 - 12**  
**CRN: 413CCR**

With a focus on health and fitness, this course guides students to be active and healthy now and for a lifetime. Effective strategies and techniques are a foundation of the course so that students can continually make improvements in all areas of wellness. Students will set personal goals in areas of wellness. Fitness

assessments will enable students to establish baseline levels of fitness and work toward improvement in these areas. Students will also be introduced to different types of lifetime and leisure sports, matters of Public Health and the effects of drugs, alcohol and decision making on matters of health and fitness.

**\* This class fulfills the PE or health credit requirement.**

## **INTRODUCTION TO SPORTS MEDICINE**

**1 Credit**

**Grades 10 - 12**

**CRN: 416CP**

**Prerequisite:** *Successful completion of PE*

This course will focus on sports medicine and will introduce students to fields related to the medical aspect of sports and sports injuries, such as athletic training, physical therapy, orthopedic medicine, kinesiology, certified personal training, and more. The course will focus on the basic skills related to sports medicine including prevention, care, rehabilitation, evaluation, and diagnosis. The course will include classwork and hands on application in a lab setting. Through classroom engagement and hands-on application, students will become familiar with the concepts related to sports medicine. Students will learn about and understand how to care for specific athletic and orthopedic injuries and illnesses as well as understand the sports medicine environment.

## **WEIGHT TRAINING/FITNESS**

**1 Credit**

**Grades 10 – 12**

**CRN: 901CCR**

**Prerequisite:** *Successful completion of PE*

This course will provide students with the opportunity to learn and experience proper lifting techniques with emphasis on individual strength training and cardiovascular exercise. The students are required to be self-motivated, to train hard every class period, and will be required to maintain a daily log which charts their progress through the course. Each student will design (with the help of the teacher) their own personal fitness and weight program to fit their personal needs. Students will participate in pre-and post-fitness tests. This course may not be repeated.

## **Information & Communication Technology and STEAM (Science, Technology, Engineering, Art, and Math) Department**

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<b>Graduation requirements for Standard Diploma and Diploma with Distinction</b>
1 credit of Computer (ICT) All classes below count as an ICT credit

## **INFORMATION TECHNOLOGY**

**1 Credit**

**Grades 9 – 12 (recommended in grades 9 or 10)**

**CRN: 659CCR**

The objective of this course is to provide a comprehensive introduction to standard software applications such as spreadsheets, word processors, and databases (specifically Microsoft). Implications and ethical use of the internet, both for research and social media will be explored. Students will also have the opportunity to explore Web 2.0 tools related to time and project management, communication and collaboration.

**\*FKA Computer Technology Bootcamp & Digital Literacy**



## **INTRODUCTION TO DIGITAL ARTS**

**1 Credit**

**Grades 9 – 12**

**CRN: 665CCR**

Students will begin to understand the basic digital design principles and tools utilized in the visual arts. Students will be exposed to typography, vector and bitmap imaging, page layout, file transferring and graphical use. Students will gain fundamental skills related to the use of the computer as a design tool and illustrative medium. Mastery of basic Photoshop skills are a key component of this class.

## **INTRODUCTION TO DIGITAL PHOTOGRAPHY**

**1 Credit**

**Grades 10 – 12**

**CRN: 666CCR**

**Prerequisite:** *Introduction to Digital Arts*

**\*This course may count as either an Art OR an ICT credit.**

Students will learn to use digital cameras to create emotive, moving photographs. Students will be introduced to composition, lighting, focusing, white balance and resolution. Students will learn how to **manually** control their cameras (NO auto settings). Students will also explore photographing different subjects from nature to portraits to abstract imagery and art and will use Photoshop to edit their photos. Students will develop an online portfolio of their work using Google apps to have artifacts they can access at home or to share with colleges in the future. **This class goes outside regularly so students must have appropriate clothing and be able to hike on rocky terrain, soft ground and snow or ice.**

## **ADVANCED DIGITAL PHOTOGRAPHY**

**1 Credit**

**Grades 10 – 12**

**CRN: 806CCR**

**Prerequisite:** *Introduction to Digital Photography*

**\*This course may count as either an Art OR an ICT credit.**

Students will work alone **and collaboratively** exploring: advanced portraiture, using lighting and new tools, bokeh photography, professional macro and/or product photography, short GIF's or MP4's and advanced Photoshop projects. Students will also build and develop their online portfolios, chronicling their work and growth as a photographer. This class will be geared toward students that enjoy photography and have considered it as a career or that want to develop their understanding of how photography might be used in the "real world".

**\*NOTE: This class goes outside regularly so students must have appropriate clothing and be able to hike on rocky terrain, soft ground and snow or ice.**

## **VIDEO PRODUCTION I**

**1 Credit**

**Grades 10 – 12**

**CRN: 656NCCR**

Learn basic video and audio techniques while making movies and small video productions

The student is to learn a basic understanding of audio and video equipment along with the proper software to run production procedures. In doing so, ultimately that student is to formulate ideas and create movies and small video productions, exploring a variety of film and television stylistic approaches. Upon doing that, the student will participate in expressing ideas and feelings when critiquing peers products and demonstrate knowledge from past learned subjects.

## **VIDEO PRODUCTION II**

**1 Credit**

**Grades 11 – 12**

**CRN: 657NCP**

**Prerequisite:** *Successful completion of TV Production 1*

Students will extend their learning from TV Production by experimenting with manual functions of the camera and story-telling. Cross curriculum will occur as students will direct and produce short movies, public service announcements, and commercials across the district. Advancement of Adobe Production Suite will take place including Premiere, Photoshop, and After Effects. Like TV Production and Digital Photography this is a project-based course with the ability to work independently.

## **INTRODUCTION TO ARDUINO**

**1 Credit**

**Grades 9 - 12**

**CRN: STEAM3CCR**

**Prerequisite:** *Successful completion of Computer Technology Boot Camp/Digital Literacy, Intro to STEAM, participation in Robotics, or teacher approval*

Have you ever wanted to make a robot react to your commands, an alarm to keep your little brother out of your room, an automatic cat feeder or custom colored lights for your skateboard? Do you wonder at how your phone can tell which direction it's being held? Do you like coding on a computer? Then this class is for you! In this class you will explore the exciting new world of Arduino microprocessors, (tiny "computers"), where makers are inspired to create new and wonderful things based on what they need. Well known technology colleges, like RIT, are using Arduinos right now! If you have any questions see Mrs. McCracken for details.

## **INTRODUCTION TO STEAM**

**1 Credit**

**Grades 9 – 12**

**CRN: STEAMCCR**

*This course will satisfy one Art or ICT credit needed for graduation*

Introduction to STEAM is a course that explores the various careers and paths available in today's world. Students will use the Principles of Design and Engineering throughout this course while working alone, and often, in teams. A great deal of emphasis will be placed on real-world applications and hands-on exploration and creation. Students will use and develop their higher order thinking abilities to problem solve, (and improve), their design challenges. Drafting, modeling, wiring, growing vegetables, coding, and designing are just some of the things this class will entail. Once this course is completed students may move onto more advanced STEAM classes like Robotics or Intro to Arduin. Emphasis will be placed on real-world applications and hands-on exploration.

## **YEARBOOK**

**1 Credit**

**Grade 12**

**CRN: 860A**

**Prerequisite:** *Digital Photography, TV Production, or teacher approval*

*\*This class is only offered first semester*

A challenging course in which students have the opportunity to prepare a publication, run a business, and record history. Students will work with an online yearbook program to design page layouts, choose photos, and problem solve. Students in this course will need to work together and will be required to attend after school events and sell ads to local businesses in order to complete class requirements. Even though this class is only offered S1, at the end of the year students will be encouraged to work with video software to create the senior slideshow and promote the book. Yearbook is a tremendous responsibility, but very rewarding.

**COMPUTER-AIDED DESIGN (CAD):**  
**CRN: 704RS**  
**Grades 11 - 12**

**1 Credit**

CAD is the study of graphical communication. The drafting fundamentals studied in this course will include 3D Solid Modeling, blueprint reading, measurement, geometric construction, orthographic projection, section views, and dimensioning. All work is performed using current CADD software (Solidworks) on personal computers.

**Music Education Department**

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<p style="text-align: center;"><b>Graduation requirements for Standard Diploma and Diploma with Distinction</b></p>
<p>1 Credit of Music or Art</p> <p><i>*Students going for the NH Scholars with an ART or STEAM distinction require 2 credits</i></p> <p><i>*NOTE: Students can choose to take chorus or band more than once for credit.</i></p>

**BAND**  
**Grades 9 – 12**  
**CRN: 951CCR**

**1 Credit**

**Prerequisite:** *Students who have not participated in band at the high school or middle school level should meet with the teacher prior to signing up for this class.*

This course provides an opportunity for student instrumentalists to practice and perform a varied repertoire of music. Prior experience reading music and playing a band instrument is required. Students without such experience will need permission from the instructor. Participation in concerts and other school events is expected for all students enrolled in the course.

**CHORUS**  
**Grades 9 – 12**  
**CRN: 950CCR**

**1 Credit**

This course provides an opportunity for students of varying musical backgrounds to come together and sing a varied repertoire of music. Students will learn proper vocal technique and music-reading skills. Emphasis will be placed on sight-reading rhythms and simple melodies. Other potential areas of exploration include musical theater and music history. Participation in concerts and other school events is expected for all students enrolled in the course.

**MUSIC THEORY & SONGWRITING**  
**Grades 9-12**  
**CRN: 952CCR**

**1 Credit**

This course provides students of all musical backgrounds an introduction to basic music theory in order to understand how music is written and how to write music. A basic understanding of how to read music is helpful but not needed.

### **Additional Offerings**

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#### **LEARNING LAB**

**1 Credit**

**Grades 9 – 12**

**CRN: L010S1, L010S2**

Learning Lab is designed to provide individualized support to identified students. Students will focus on three core areas including: progress monitoring toward academic and behavioral goals stated in each students' Individualized Education Plan, instruction in the seven career development curriculum competencies, and academic tutoring on an as needed basis.

#### **TEACHER ASSISTANCE PROGRAMS**

**1 credit**

**Grades 11-12**

The Teacher Assistance Program is intended for students with an interest in a teaching career or a strong interest in the subject matter.. Students may earn elective credit by serving as an assistant in a class where they received a minimum grade of 85%. Students who have failed or withdrawn from any class during the previous or current quarter are ineligible. Students must stay within the attendance policy to qualify for participation. Students will be awarded a pass/fail grade. A student may earn no more than one (1) credit from this program, enroll in more than one program at a time, or repeat as an assistant in the same program. The student must demonstrate responsibility and gain teacher and ELO Coordinator approval. Possible TA classes include:

Freshman Sem	Personal Finance
Inside the Criminal Mind	Library
Studies of the Unknown	Art I
Film and Lit	French I
College Comp	French II
Hero's Journey	Metalsmithing
Everyday Living Skills	Intro to Digital Photo
Learning Lab - math tutoring	Intro to Digital Arts
Digital Literacy	Wellness for Life

#### **CAREER EXPLORATION ELO**

**1 Credit**

**Grades 11 - 12**

Students who participate in this ELO will have an opportunity to explore a variety of different careers that align with their personal interests and strengths. Students may be required to work through a career exploration course on Edmentum and will utilize various assessments and tools through SCOIR. As with all ELO experiences, students will be required to reflect on their experiences through reflective journals and regular meetings with their instructor. Further exploration through job shadows and other real-world professional experiences will be available as students move through this course.

## **Lakes Region Technology Center (LRTC) Courses**

All Technology Center Courses are designated as College Prep (CP) Courses, except where otherwise noted. Students may contract for Honors level where noted in course descriptions within the first two weeks of the course with approval of respective teachers.

All Technology Center offerings will use a variety of instructional strategies that accommodate individual learning styles to engage students to reach the competency levels of each program. Students will learn practical skills that emphasize career preparation and planning.

All students are eligible to select these courses in Grade 11-12. **ALL COURSES MEET FULL YEAR. Students may not drop an LRTC course halfway through the school year.**

*Please note there may be Materials Fees associated with technology courses. Materials Fees vary depending on the course and/or the project choice of the student.*

### **LRTC Courses:**

Agricultural Science I & II	Graphic Design I & II
Automotive Science I & II	Health Science Technology I & II
Careers in Education I & II	Hospitality & Tourism I & II
Collision Technology I & II	Marketing Education I & II
Computer Network Systems I & II	Multimedia Communications I & II
Construction Trades I & II	Nurse Assisting
Culinary Arts I & II	Precision Manufacturing I & II Theater
Emergency Medical Technician	Stagecraft I & II

## **AGRICULTURAL SCIENCE PROGRAM**

### ***Agricultural Science I***

Grades 11-12

**2 Credits**

### ***Agricultural Science II***

Grade 12

**4 Credits**

***Agricultural Science Level I & II meet the senior year math content course requirement.***

Ag-Science is a three-year program. Ag-Science I will meet for one block per day. In the Ag-Science II course classes will meet for 2 blocks per day. Students will participate in supervised work experience programs and related theory concurrently. They will use a variety of tools, supplies, instruments and equipment in the areas relating to: Agribusiness, Horticulture, Agriculture Mechanics, Aquaculture and Forestry/Agriculture Resources. Safe work habits and attitudes are heavily stressed. Future Farmers of America (FFA) activities designed to develop leadership skills will be learned at various community locations including areas for forestry, nursery, landscaping, crop production, and water and air experimentation. The skills and knowledge learned in these courses are also basic for occupations in the many fields allied with agriculture.

***Agricultural Science I may be taken for a biological science credit to meet high school graduation requirements. However, students considering 2-4 yr. colleges must complete Biology CTP/Honors to meet college admissions requirements.***

### **Employment Opportunities upon Completion of Course:**

Greenhouse Employee  
Florist  
Nursery Worker  
Conservation Specialist  
Agribusiness Sales Person

Horticulture Supply Sales  
Landscape Gardener  
Groundskeeper  
Farm Equip Maintenance  
Assistant Heavy Equipment Operator

**Opportunities through Further Education or Experience:**

Greenhouse/Nursery Manager  
Agribusiness Manager  
Landscape Architect  
Soil Conservationist  
Fruit Grower

Agricultural Teacher  
Conservation Officer  
Farm Equipment Mechanic  
Forester

**Recommended Background:** Related Math/Science Courses, Related Technology Education Courses

**AUTOMOTIVE SERVICE TECHNOLOGY PROGRAM**

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***Automotive Technology I***

Grades 11  
**2 Credits**

***Automotive Technology II***

Grades 11-12  
**4 Credits**

***Automotive Technology I & II are approved to meet the senior year math content course requirement.***

This three-year program is designed for both male and female students interested in developing mechanical and technical skills in repairing and servicing automobiles. Both two- and four-cycle engines will be studied to include many applications of these systems in modern automobiles. Safe and proper use of many tools and pieces of equipment found in today's automotive repair shops will be stressed and welding equipment will be introduced.

Second year activities will sharpen and expand skills attained in the first year and also include introduction to automobile diagnostics and tune-up procedures covering larger internal combustion engines using both gas and diesel fuels. The student will study the major components of today's automobile and gain experience with electrical and electronics systems, steering and suspension, power train, brakes, and related tools and diagnostic equipment.

**Employment Opportunities upon Completion of Course:**

Entry Level Automotive Technician  
Retail Auto Parts Sales  
Service Station Attendant

**Opportunities through Further Training and Education:**

Automotive Dealership Owner  
Automotive Service Instructor  
Master Technician \

**Recommended Background:**

Metals  
Electricity  
CAD  
Accounting I

Math/Science

Computers

## **CAREERS IN EDUCATION PROGRAM**

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### ***Careers in Education I***

Grades 11-12

**2 Credits**

### ***Careers in Education II***

*Prerequisite: Successful completion of Careers in Education I*

Grade 12

**2 Credits**

### ***Careers in Education I & II are approved to meet the senior year math content course requirement.***

The Careers in Education (CIE) program prepares students for a career working with various age children. If you are interested in becoming an elementary teacher, middle school teacher, or even teaching in a high school, this program will get you started. The curriculum combines classroom work on developmental theories for child development, writing lesson plans, and learning about every aspect that today's educators must know. There is also a hands-on portion of these classes where the students gain valuable experience working with children ages 4 to 12. The LRTC Magic Moments Preschool Program, (a cooperative effort between the Wolfeboro Area Children's Center and the Lakes Region Technology Center), is attached to the CIE classroom, thus giving the CIE students an opportunity to help out there three days a week.

The CIE students will also have the opportunity to work with children at the nearby elementary schools.

This course will also focus on topics such as the history of early childhood education, philosophies of education, state laws that apply to schools, and the NH Certification process. Students will learn about the many options and pathways to become a teacher at any certification level in the field of education.

CIE students will serve as assistant teachers in the LRTC Magic Moments Preschool Program, the Wolfeboro Area Children's Center, Carpenter School, and Crescent Lake School. They will learn to develop lesson plans, teach skills and participate in problem solving issues as they arise in a classroom situation. As students' progress through the program, internships are available at these sites, with transportation provided.

CIE students participate in the Educators Rising Association, which helps students further develop leadership, professional skills and make connections to future careers and scholarship opportunities. This program provides invaluable opportunities when considering:

- More companies are developing on-site day care centers
- More states are moving towards full-day kindergartens
- Many states are considering universal preschool programs
- Colleges value students who have explored careers such as CIE, as they are ready to take coursework that is meaningful to the program they are enrolled in

### **Employment Opportunities upon Completion of Course:**

Teacher's Aide

Nanny

Pediatric Assistant

### **Opportunities through Further Education or Experience: \**

Elementary School Teacher

Recreation Director

Owner/Day Care Center

Social Worker  
Teacher

**Recommended Background:**

Family and Consumer Sciences Courses

**COLLISION TECHNOLOGY PROGRAM**

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***Collision Technology I***

CTP

Grades 11-12

**2 Credits**

***Collision Technology II***

CTP

Grade 12

**4 credits**

***Collision Technology I & II are approved to meet the senior year math content course requirement.*** This is a three-year program designed for both male and female students interested in auto body repair and refinishing. The content is based on industry standards and consists of the fundamentals: mechanical/electrical components, nonstructural analysis and damage repair, structural analysis and repair, painting and refinishing. Work ethic and occupational safety will be emphasized.

Second year activities will further student skills in the state of the automotive collision repair. The course will focus on the basics to more advanced techniques to include custom graphics, air brushing, murals and custom paint work.

**Employment Opportunities upon Completion of Course:**

Body Shop Technician

Sign Shop

Commercial Lettering Installation

**Opportunities through Further Training and Education:**

Insurance Adjuster

Custom Graphic Artist

Service Writer/Manager

**Recommended Background:**

Metals

Electricity

CAD

Accounting I

Math/Science Computers

**COMPUTER NETWORK SYSTEMS PROGRAM**

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***Computer Network Systems I***

CTP/Honors

Grades 11-12

**2 Credits**



## ***Computer Network Systems II***

CTP/Honors

Grade 12

**2 Credits**

***Computer Network Systems I & II are approved to meet the senior year math content course requirement.***

Computer networks and related computer technology surround us and are expanding at an increasing rate. The broad field of Information Technology (IT) is constantly evolving and expanding. Career opportunities are abundant for individuals with skills related to computer implementation, computer network installation, maintenance, administration and design.

Students enrolled in the Computer Network Systems course will be exposed to a wide variety of experiences including computer repair and configuration, network hardware and installation, documentation and web page/server development. Enrolled students are also eligible to enroll in the Running Start program enabling them to begin working toward a certificate or associates degree through the New Hampshire Community Technical College system. The credits earned are transferable to accepting colleges.

Level III is designed to help students pursue individual interests and educational goals related to the area of computers, computer networking and computer program coding. Students will also work on developing “soft skills” by serving as lab assistants and mentors to the level I and II students. Some of the resources students will access for this course are: MIT App Inventor, the Raspberry Pi computer platform, Code Academy, Robot C program language. Students will also be able to access industry based certification exam course ware to help prepare for certification exams. Students will be responsible for preparing quarterly project goals statements and will be assessed on their level of success in achieving the stated goals.

Computer Network Systems meets for one 90-minute block per day and is offered as both a College Tech Prep and Honors level course. The curriculum is rigorous and demanding while being rewarding for those individuals interested in computer related technologies.

**Students are able to participate in Cisco Academy IT Certification. Opportunities through Further Education or Experience:**

Computer Network Administrator  
Computer Technical Support  
Computer Programming  
Computer Network Installer  
Web Page Master/Developer

Computer Network Technician  
Computer Network Support  
Computer Network Designer  
Computer Technician  
Computer Server Development

## **CONSTRUCTION TRADES PROGRAM**

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### ***Construction Trades I***

CTP

Grades 11-12

**2 Credits**

### ***Construction Trades II***

CTP

Grade 12

**4 Credits**

***Construction I & II are approved to meet the senior year math content course requirement.***

The Construction Trades Program is designed for the student who wishes to pursue a building construction career. Students are instructed in the safe use of all tools, materials, and construction techniques necessary to succeed in the building trades.

Areas of instruction include carpentry, plumbing, residential electricity, heating, cabinet making, masonry and painting. The basic principles of math, blueprint reading, local building codes, cost estimates, building materials and structural design, with a strong emphasis on construction and structural safety are integrated into these instructional areas.

The first year of this program will provide the fundamentals and basic skills in the planning and construction of a residential home, including framing methods, foundation work, insulation, roofing, flooring, and dry wall construction. Instruction in these skills will take place in a laboratory setting.

In the second year, the program Instruction will focus on areas such as: windows and doors, staircases and interior finish work. Instruction will focus on areas such as: windows and doors, staircases and interior finish work. Level II students will be able to concentrate on specific areas according to their interests and continue their development in the areas of advanced carpentry and cabinet making techniques.

**Employment Opportunities upon Completion of Course:**

Apprentice Carpenter	Mill Worker
Mason’s Assistant	Plumbing and Heating Assistant
House Painter	

**Opportunities through Further Education or Experience:**

Master Carpenter	Journeyman
Master Mason	Master Electrician
Cabinet Maker	Heating Apprentice
Building Contractor	Apprentice Mason
Apprentice Plumber	Journeyman Electrician
Licensed Plumber	Heating Contractor

**Recommended Background:**

Related Industrial Technology  
Education Courses  
Related Math/Science Courses  
Accounting I

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**CULINARY ARTS PROGRAM**

***Culinary Arts I***

CTP  
Grade 11-12  
**2 Credits**

***Culinary Arts II***

CTP  
Grade 12  
**2 Credits**

***Culinary Arts I & II are approved to meet the senior year math content course requirement.  
College credit available for qualified students via Dual Enrollment, fee applicable.***

The Culinary Arts Program provides the student an opportunity to specialize in the areas of food preparation, quantity cooking, purchasing and storage of products, serving, and the various management aspects of the food service industry.

Students will be trained in the use of various kitchen, fast food, and restaurant equipment common to the modern food service trade and become involved in the actual preparation of food, and volume cooking for activities such as banquets, luncheons, and special community functions.

Additional topics in the Culinary Arts program include menu development and costing, purchasing, bookkeeping, inventory control, sanitation and safety, and local and state food service regulations.

A major part of this program will be the students' involvement in the Center's restaurant. This facility will provide an area for students to experience the various functions of a person involved in the food service industry

After two years in Culinary Arts, the student has learned how a restaurant is run from prepping, cooking, and serving food in the dining room. Culinary Arts III will expose students to the management side of the business. Students will be trained to: order food such as meats, produce, and dry goods using USDA specifications; manage people in a positive way; manage the Skylight kitchen and direct students in the following of all sanitation and food service rules; manage the Skylight Dining Room; work the class treasurer to oversee the accounting functions of the business.

**Employment Opportunities upon Completion of Course:**

Line Cook	Baker
Sous Chef	Food Purchaser
Short Order Cook	Dining Room Manager
Catering Chef	

**Opportunities through Further Training or Education:**

Master Chef	Purchasing Agent
Restaurant Manager	Food Salesperson or Broker
Dietitian	Cruise Line Food Services
Airline Catering	

**Recommended Background:**

Food & Nutrition  
Accounting I  
Math  
Science

**EMERGENCY MEDICAL TECHNICIAN PROGRAM**

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***Emergency Medical Technician***

Honors  
Grades \*11-12

**2 Credits**

*Prerequisites: It is highly recommended that students who choose to take this course have successfully completed a CTP, Honors or AP level Biology course and/or have the approval of the instructor.*

***Emergency Medical Technician is approved to meet the senior year math content course requirement.***

The Emergency Medical Technician (EMT) program is designed to train the student in emergency medical care in the pre-hospital environment. It is the entry level training in the Emergency Medical Services Field. The program follows the current Department of Transportation EMT curriculum. The program instructs students in medical practices available to prehospital personnel, precise patient assessment and management of trauma, medical emergencies, and pharmacological interventions. This program will develop the student's confidence, knowledge and skills in performing critical assessments and management of patients with medical trauma related to life threats. The focus of this course is on the development of the EMT's critical role as a team member during patient crisis interventions.

**Time and activities outside of the classroom will be required as part of this course. Additional related costs may be incurred in the form of uniforms/clothing/supplies for field internships.**

**Students will be required to complete both the cognitive and psychomotor exams for EMT certification as part of this course.**

*\*Due to age restrictions with becoming certified as an EMT, students taking this course must be 18 years of age during the course or turning 18 with 12 months of course completion.*

## **GRAPHIC DESIGN PROGRAM**

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### ***Graphic Design I***

CTP

Grades 11-12

**2 Credits**

*Prerequisite: Office Software Applications (OSA) and Desktop Publishing or OSA and **presently** taking Desktop Publishing.*

### ***Graphic Design II***

CTP/Honors

Grade 12

**2 Credits**

***Graphic Design I and II are approved to meet the senior year math content course requirement.***

**Graphic Design I** will introduce students to the basic elements of graphic visual communication through lecture, demonstration and hands-on applications. Students will learn the history of design, principles and practices of graphic design using typographic components. Adobe Illustrator, Adobe InDesign and Adobe Photoshop software are used in exploring visual perception through a variety of creative exercises that include but not limited to; composition, graphic design principles, digital photography and typography. Students will produce their ideas in print creating multi-page brochures and posters, along with producing a one of a kind yearbook by generating new ideas and concepts and designing distinctive layouts.

**Graphic Design II** students will continue to develop skills that lay the foundation for basic design, color theory and practical lab application. Students will explore, experiment, and apply proper application of ideas through the design process. Project management, collaboration, peer review, design and redesign, research and communications and essential components are emphasized during the second year.

Adobe InDesign, Adobe Illustrator and Adobe Photoshop software are used in exploring design problems, logo design and designing symbols. Students will produce a one of a kind yearbook by generating new ideas and concepts and designing distinctive layouts.

**Employment Opportunities upon Completion of Course:**

Graphic Design Assistant  
Social Media Graphic Designer Assistant  
Multimedia Designer Assistant  
Product Designer

**Opportunities through Further Training or Education:**

Graphic Designer  
Print Production Illustrator  
Animator  
Desktop Publisher  
Marketing Specialist

**Required Background**

Office Software Applications

**Recommended Background**

E-Business I  
Desktop Publishing

**Have had or presently taking**

E-Business or Desktop Publishing 104  
Web Designer  
Visual Design Director Advertising  
Freelance Designer  
Production Manager

**HEALTH SCIENCE TECHNOLOGY PROGRAM**

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***Health Science & Technology I***

CTP/Honors  
Grades 11-12  
**2 Credits**

***Health Science & Technology II***

CTP/Honors  
Grade 12  
**2 Credits**

***Health Science and Technology I & II are approved to meet the senior year math content course requirement.***

**College credit available for qualified students via Dual Enrollment, fee applicable.**

This program explores the vast career opportunities and career pathways within the Health Science field. First-year students will be introduced to Anatomy & Physiology, Basic Medical Terminology, and Pathophysiology. They will learn about healthcare facilities and their role as health care workers including infection control, workplace safety, and the role of government agencies in current healthcare systems. Students are introduced to various basic skills inherent to many healthcare fields with a focus on developing critical thinking, professional and legal responsibilities, and business education. Guest speakers are an essential part of the program.

Students enrolled in the Health Science Technology II course will continue to learn medical terminology, and various skills relative to health services, and health sciences. Additionally, students will continue to further their business and soft skills preparing them for a career as a healthcare professional. They will have the opportunity to observe various positions in the healthcare field and may be able to practice skills if trained to do so. Students will continue to work on their portfolios documenting their vocational skills/experiences. The second-year student has the opportunity to complete a Nursing Assistant or Emergency Medical Technician which prepares them for licensing or certification. The nursing assistant program offers state testing at the completion of the program.

The honors student in the Health Science Technology program will expand their knowledge through research. Students will work on in-depth medical research and present their work to the class. Each student will also be expected to research current medical events. The honors student will be expected to apply the current lesson plans to different scenarios for testing and application in the healthcare environment.

**Employment Opportunities upon Completion of the Course Include:**

- EMT (Certification Required)
- Nursing Assistant (Certification Required by Board of Nursing)
- Veterinarian’s Office Aide
- Dental Office Aide
- Dietary Aide

**Opportunities for Further Training or Education:**

- |                                |                       |
|--------------------------------|-----------------------|
| Dental Hygienist               | Physician’s Assistant |
| Dental Assistant               | Psychologist          |
| Physical Therapy Assistant     | Registered Dietician  |
| Medical Records Assistant      | Athletic Trainer      |
| Sports Medicine                | Chiropractor          |
| Occupational Therapy Assistant | Massage Therapist     |
| Occupational Therapist         | Nurse Practitioner    |
| Registered Nurse               | Physical Therapist    |
| Surgical Technician            | Speech Therapist      |
| Licensed Practical Nurse       | Veterinarian          |
| Dentist                        | Paramedic             |

**HOSPITALITY AND TOURISM PROGRAM**

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***Hospitality and Tourism I***

CTP  
Grades 11-12  
**2 Credits**

***Hospitality and Tourism II***

CTP  
Grade 12  
**2 Credits**

***Hospitality and Tourism I & II are approved to meet the senior year math content course requirement. College credit available for qualified students via Dual Enrollment, fee applicable.***

Hospitality and Tourism Level I is a comprehensive introduction to the field of hospitality and tourism. The American Hotel & Lodging Educational Institute’s (AHLEI) high school curriculum, The Hospitality and Tourism Management Program (HTMP), was developed by industry experts and members of the American Hotel & Lodging Association as the official industry-recognized curriculum to prepare students for roles in the hotel industry and beyond. (AHLEI, 2017) The course also offers an array of hands on field work for students. This includes an internship at a local hotel, visiting local tourism destinations and welcoming industry related guest speakers to the classroom.

Hospitality and Tourism Level II continues with the AHLEI curriculum with an emphasis on management and leaderships skills leading to college and/or career preparedness. Students are involved with the planning and facilitation of many school events, including Technical Education Week. Level II students will have the opportunity to apply and interview for professional level hospitality and tourism internships. Students will continue to work on portfolios documenting their vocational skills and experience.

**Employment Opportunities upon Completion of this Course:**

Front Desk Agent	Restaurant Hostess
Housekeeping Attendant	Wedding Coordinator
Tour Guide	Banquet Coordinator
Hotel Concierge	Reservation Coordinator
Turndown Coordinator	Restaurant Server Cruise Ship Attendant

**Opportunities through further education and experience:**

Hotel General Manager	Recreational and Forest Management
Hotel & Lodging Management	Event and Venue Planner
Entertainment Events Manager	Cultural and Heritage Tourism Management
Eco-Tourism Management	Business Management
Entertainment Marketing	Technology Director
Airline Flight Attendant	Cruise Ship Director
Cruise Ship Engineer	

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**MARKETING EDUCATION PROGRAM**

***Marketing Education I***

CTP

Grades 11-12

**2 Credits**

*\*The completion of this class fulfills the Economics credit requirement for graduation.*

***Marketing Education II***

CTP/Honors

Grades 12

**2 Credits**

*Marketing I & II are approved to meet the senior year math content course requirement.*

**College credit available for qualified students via Dual Enrollment, fee applicable.**

**The successful completion of this class may result in a nationally recognized certificate.**

**Marketing Education I** includes a wide variety of career preparation activities. It is designed to provide the basic skills and knowledge required for job placement in one or more of the marketing functions. These marketing functions include: buying, selling, storing, transporting, financing, merchandising, pricing and marketing research as performed by managers and employees of various retail, wholesale and service businesses.

Topics in the first year of the Marketing Education program include basic selling, employability, and communication skills, retail mathematics, visual display, and customer services. In Level II, students will learn supervision, selling, merchandising, and advertising techniques, as well as business planning, store location, layout and organizations. Individual project work will be arranged so that students may specialize in any particular area that meets his/her needs desires, and personal goals.

Students will acquire skills and knowledge of these functions through classroom instruction, group and individual projects, the operation of “Lab-Business” and DECA, - “An Association of Marketing Students”. All students are required to demonstrate skills attainment through effective and efficient participation in “The Pro Depot”, the school store.

**Marketing Education II** students will continue to learn retail store operation, but at the management level, where supervisory skills will be a major focus. They will also have the opportunity to become involved in the Hospitality Marketing Management Program, which may include work based learning opportunities through STW as well as an opportunity for national certification. *This program also fulfills the economics requirement for graduation.*

**Employment Opportunities upon Completion of Course:**

Salesperson	Advertising Assistant
Stock Clerk	Register Operator
Customer Service Clerk	Merchandising Assistant
Shipping Clerk	Head Cashier
Buyer’s Assistant	Shift Supervisor
Display Assistant	

**Opportunities through Further Education or Experience:**

Store Manager  
Wholesale Broker  
Entrepreneur  
Business Owner  
Insurance Agent  
Sales Manager

**Recommended Background:**

Office Software Apps  
Freshman English  
Freshman Math  
Psychology  
Art  
Accounting I

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**MULTIMEDIA COMMUNICATIONS PROGRAM**

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***Multi-Media I***

CTP  
Grades 11-12  
**2 Credits**

***Multi-Media II***

CTP  
Grade 12  
**2 Credits**

***Multi-Media I & II are approved to meet the senior year math content course requirement.***

**College credit available for qualified students via Dual Enrollment, *fee applicable***

**Multi-Media I** – Are you interested in a career in television broadcasting or think it just might be fun to be



on television? Do you love the movies or television, and have an interest in learning more about how they're made? Are you interested in producing movies or a television program of your own? This course will take you through the ins and outs of being a news anchor, reporter, director, writer, producer, and editor for live television broadcasting. It will also cover elements of script writing, shooting movies with HD equipment, editing it, and submitting your work to film festivals, and screening it on Knight Watch. Students who take this year long course will produce the daily broadcast of a live news show out of the LRTC television studios five days a week. Students will gather news, create scripts, prepare graphics, produce video stories, and then perform the daily broadcast live on channel 26. In addition, students will then take these skills and apply them to producing other television shows of their choosing. In addition, students will write and produce films for film festivals and other screenings.

**Multi-Media II** – This course is offered as a second level for Multi-Media I. Students in this year-long course have the opportunity to write their own independent study involving one or both of the disciplines.

**Opportunities through Further Education or Experience:**

TV News Production	Media Specialist
Telecommunications Production	Journalism
Corporate Training & Marketing	Video & Film Making/Production
News Reporting & Anchoring	
Radio Broadcasting	Communications Technician
Video Production	Communications Arts & Sciences

**Recommended Background:**

Computer Literacy  
Creative Writing  
Office Software Apps  
Journalism

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## **NURSE ASSISTING PROGRAM**

*Nurse Assisting*

CTP/Honors

Grade 12

**2 Credits**

*Prerequisite: Health Science Technology I Registration: Students are required to take Health Science Technology II while enrolled in this course.*

**College credits are available for qualified students via Dual Enrollment, fees applicable.**

The NH Board of Nursing approved Nursing Assistant (NA) program at LRTC consists of a minimum of 46 hours of classroom theory and 60 hours of clinical for a total of 106 hours of coursework. The theory portion is delivered in the classroom. The clinical is arranged at a local health care facility. After successfully completing the NA program, students are eligible to complete the NH Board of Nursing approved written and clinical competency testing and may apply for a NH Nursing Assistant license. A background check/fingerprinting is required to obtain a Nursing Assistant License. The LRTC offers NH state competency testing for qualified candidates at the end of the course.

Nursing assistant students enrolled in the course will:

- provide safe nursing-related activities under the supervision of a licensed nurse
- describe the role of the nursing assistant within the health care system, and the qualities required for successful integration into the workforce
- identify ethical and legal issues of the nursing assistant when caring for clients
- exhibit behaviors that support clients' rights to privacy
- assist clients to attain and maintain functional independence in the health care facility or at home
- demonstrate various communication skills that will:

- enhance relationships with patients and other health care team members
- promote accuracy
- protect confidentiality concerning clients' health, safety, welfare, physical and mental conditions, and general well-being
- demonstrate the concepts of safety and infection control
- list and identify medical terms and abbreviations necessary for the assistant to communicate with nurses and staff verbally and in charting
- demonstrate understanding of the clients' emotional, social and physical health needs through skillful, direct <sup>SEP</sup>nursing related activities

The honors student in the Nurse Assisting program will expand their knowledge through research. Students will work on in-depth medical research and present research to the class. Each student will also be expected to research current medical events. The honors student will be expected to apply the existing lesson plans to different scenarios for testing and application in the healthcare environment.

**NOTE: Before participating in the clinical experience, students will incur costs relating to their healthcare records, required uniforms, and background checks, drug testing, and licensing fees. Student cost in previous years has totaled approximately \$300.00.**

**Employment Opportunities upon Completion of the Course Include:**

Licensed Nursing Assistant (Licensing Required by the Board of Nursing)

Home Health Aid (Licensing Required)

Health Unit Coordinator

**Opportunities for Further Training or Education:**

Medication Nurse Assistant (MNA)

Licensed Practical Nurse

Registered Nurse

Electrocardiogram Technician

Occupational Therapy Assistant

Physical Therapy Assistant

**PRECISION MANUFACTURING PROGRAM**

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***Precision Manufacturing I***

CTP/Honors

Grades 11-12

**2 credits**

***Precision Manufacturing II***

CTP/Honors

Grade 12

**2 credits**

***Precision Manufacturing I & II meet the senior year math content course requirement.***

**Precision Manufacturing Technology I** (Precision Machining) is the first level of a program that teaches the basics of manual and computer machining of metal products. During the first half of the semester, students will concentrate on the basics of precision manual machine operations that make close fitting items that work together. This will be achieved by learning about machine shop safety, machining processes, blueprint reading, inspection techniques, applied math in the shop, and the materials used in the precision machining industry. The second half of the semester will involve learning advanced manual machine processes and will be used to introduce the technology of Computer Assisted Drafting and Machining (CAD/CAM) and the set up and operation of highly advanced Computer Numerical Control (CNC) machines. During the first year, most of the lab projects are assigned by the instructor to build common

skills expected by machine tool employers and post-secondary schools who train both machinists and engineers. Instruction is done primarily through hands-on experience and computer application software, but classroom instruction will be used where applicable. Shop safety and safety around power machines is emphasized throughout the course.

Course Specific Competencies:

- Utilize measuring instruments to measure to .001inch accuracy.
- List the logical processes to make a machined item on mills, lathes, and grinders.
- Perform basic and applied machining math calculations.
- Interpret an orthographic projection technical drawing to make a finished machine part.

**Precision Manufacturing Technology II** is the second level of a program that emphasizes Computer Assisted Drafting and Machining (CAD/CAM) applications for high end CNC and manual machine project design and production. Students will learn and apply advanced machining skills, quality assurance, applied math, metals and composite materials, blueprint reading, and engineering basics. The students will be taught this in a “real world” shop environment where learning is primarily hands-on. For the first half of the year, learning will be done using instructor assigned projects to build upon common skills. The second half of the year will involve field trips to teach job skills and job expectations and will also involve students participating in a capstone second level project. The capstone project will be a self-designed product that showcases all the skills the students has learned throughout both levels of the course. Students are encouraged to participate in the Skills USA competition to earn a place to compete against other students from all the machining programs throughout the state to determine the “Best Student Machinist in New Hampshire.” Students who desire National Certifications in machining through the National Institute of Metalworking Skills may seek certification after they have successfully completed the necessary course requirements.

Course Specific Competencies:

- Develop/acquire basic CNC machine use, offset setting, programming skills and CAD/CAM skills.
- List and perform advanced machine tool logical process operations on a lathe, milling machine, and surface grinder; independently perform advanced and applied machining math calculations.

### **Recommended Background**

Computer Aided Design/Drafting (CAD)

Metal Working Technology I/II

## **THEATER STAGECRAFT PROGRAM**

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### ***Theater Stagecraft I***

CTP

Grades 11-12

**2 Credits**

### ***Theater Stagecraft II***

CTP

Grade 12

**2 Credits**

***Theater Stagecraft I & II are approved to meet the senior year math content course requirement.***

**Theater Stagecraft I** –Are you interested in theater, but maybe not appearing on stage? Or maybe you’re interested in learning more about creating theater and stage performance? This year-long course covers all the back stage elements needed to produce a play, musical, concert or other live stage event. Students in this class have the opportunity to gain expertise in four major aspects of technical theater: lighting, sound, set design, and costuming. All of these areas require imagination in their design, and mastery of electronic and hand tools to be successful. Students will be expected, as part of the class, to take part in some after school events, some of them as a paid employee. Events include plays, musicals, concerts and other events

in the Kingswood Arts Center and around town. Students will be certified as a technician and DJ for the Kingswood Arts Center and DJ club, and will be eligible to work as a paid technician or DJ for local events.

**Theater Stagecraft II** –This course is offered as a second level for students who have completed Theater Stagecraft I or a year of Costuming, Set Building, and/or Lights and Sound. Students in this year-long course have the opportunity to write their own independent study involving one or all of the disciplines from those three courses.

**Employment Opportunities upon Completion of Course:**

Theater Set Construction  
Dance DJs  
Theater Lighting & Sound Technician  
Actor  
Costumer

**Opportunities through Further Education or Experience:**

Costume Design and Construction  
Lighting and Sound Design

**Recommended Background:**

Construction Trades or Woodworking Textiles  
Set Design and Construction

**EXTRA-CURRICULAR OFFERINGS AT FHS**

Students often enjoy school more if involved in school-related activities. Participation is a valuable resource in developing personal abilities and also is an advantage in applying for admission to post-secondary schools. It is recommended that students participate in at least one of the activities listed below. Students must meet all eligibility requirements, as outlined in their student handbook, in order to be eligible for participation.

<p><b>ATHLETICS</b></p> <p><i>*In order to be eligible, students <b>cannot fail more than one class</b> in the previous marking term. Fall eligibility is determined by quarter 4 of the previous school year.</i></p>		
<p><b><u>FALL</u></b></p> <ul style="list-style-type: none"> <li>● Soccer</li> <li>● Golf</li> <li>● Volleyball</li> <li>● Football</li> </ul>	<p><b><u>WINTER</u></b></p> <ul style="list-style-type: none"> <li>● Basketball</li> <li>● Spirit Squad</li> <li>● Unified Basketball</li> </ul>	<p><b><u>SPRING</u></b></p> <ul style="list-style-type: none"> <li>● Baseball</li> <li>● Softball</li> </ul>
<p><b>CLUBS &amp; ACTIVITIES</b></p>		
<ul style="list-style-type: none"> <li>● Upward Bound</li> <li>● Educational Talent Search             <ul style="list-style-type: none"> <li>● Chorus</li> <li>● Band</li> </ul> </li> <li>● Class Offices</li> <li>● National Honor Society             <ul style="list-style-type: none"> <li>● Ski Club</li> <li>● Robotics</li> </ul> </li> <li>● Granite State Challenge</li> </ul>		