# Raymond High School 

 Program of Studies 2022-2023

## TABLE OF CONTENTS

| About Raymond | 3 |
| :---: | :---: |
| Core Values and Expectations | 4 |
| RHS Mission and Expectations | 4 |
| Raymond School District Policy Non-Discrimination/Equal Opportunity | 4 |
| RHS Competency-Based Grading | 5 |
| Graduation Requirements | 7 |
| Guidelines to Participate in Athletics and Co-Curricular Activities | 8 |
| Extra Curricular Activities \& Interscholastic Sports | 8 |
| Suggested Courses of Study | 9 |
| NH Scholars | 10 |
| 4-Year Personal Academic Planner | 11 |
| Notice to Prospective A.P. Students and Parents | 14 |
| College Credit Options - Dual Enrollment | 15 |
| Special Education | 16 |
| English | 19 |
| Social Studies | 26 |
| Math | 33 |
| Science | 39 |
| Physical Education and Health | 45 |
| Computers | 47 |
| NH - JAG (Jobs for NH Grads) | 50 |
| Fine and Performing Arts | 54 |
| Business Education | 57 |
| World Language | 60 |
| Family \& Consumer Sciences | 63 |
| Technical Education | 64 |
| Alternative Learning Programs | 66 |
| Seacoast School of Technology (SST) | 68 |

## About Raymond......

Raymond, incorporated in 1764, is a rural town of just under 30 square miles of land area and almost a mile of inland water area. The town was first settled by families from Exeter as a parish of Chester. It was known then as Freetown because it was first exempt from reserving its tall pine trees for masts in the Royal English Navy. It was incorporated in 1764 by Governor Benning Wentworth at which time it became known as Raymond. "Taking a new and classical name shows that there are minds not disposed to tread all of the time in one path, but capable of thinking and advancing and that the word Raymond means the lustrous, luminous, or shining world. "

The population of Raymond is approximately 12,000 and is located 20 miles from Manchester, NH, 30 miles from the seacoast, and 70 miles from Boston. Built in 1988, the high school is located on 60 acres of land that was once part of a large farm. Raymond High School is a NEASC and New Hampshire Department of Education accredited four-year public comprehensive high school. The central office is located across from the high school gym.

The Raymond School District is comprised of three schools. Lamprey River Elementary School houses grades K-3 with a total enrollment of 353 students during the 2020-2024 2022-2023 school year. Iber Holmes Gove Middle School houses grades 4-8 with a total enrollment of 441 students during the 2020-2021 2022-2023 school year. Raymond High School houses grades 9-12 as well as the district's preschool program with a total enrollment of 397426 students eturing the 2020-2021 sehoot year.

The largest businesses in Raymond are: Walmart Distribution Center, Hannaford Supermarket, JCR Construction, and Tuckaway Tavern \& Butchery.

## RAYMOND HIGH SCHOOL

## CORE VALUES \& EXPECTATIONS

## WE ARE FOREVER GREEN

## Core Values

At Raymond High School we value high levels of learning for all. Through innovation, collaboration, and encouragement, we challenge each student with a rigorous and relevant program

## Beliefs

Our community is committed to providing a safe, rigorous, and relevant learning environment.

- We are dedicated to recognizing, supporting, and celebrating everyone's diversity, unique abilities, learning styles, and achievements.
- We demonstrate self-reliance, critical thinking, effective communication, and productive collaboration.
- We practice perseverance when challenged.
- We are engaged and responsible citizens.
- We are accountable for our own actions.


## Learning Expectations

## Academic

Critical Thinking Communication

Social
Collaboration Engaged
Self- Reliance Responsible
Perseverance

Civic

## Raymond School District Mission Statement \& Vision Statement

The Mission of Raymond School District is to develop successful and adaptable lifelong learners. With our community as partners, each student will be valued, encouraged and challenged by a rigorous and relevant program.

Uniting our school district and community to prepare students for future success; ready for anything!

## Raymond School District Policy

Non-Discrimination/Equal Opportunity The District shall not discriminate in its education programs, activities, or employment practices on the basis of race, color, national origin, age, sex, sexual orientation, religion, or handicap under the provision of Title V1 of the Civil Rights Act of 1964, the Age Discrimination Act of 1967, Title IX of the Education Amendment of 1972, and Section 504 of the Rehabilitation Act of 1973. Any person having inquiries concerning the District's compliance with the regulations implementing these laws may contact the Superintendent of Schools.

## Competency-Based Grading

Raymond's competency-based grading system is designed to report out to students and parents three different types of information: 1-Competency in various academic skills, 2-Overall grade average for the course, and 3-Work Study Practices. Ultimately, this will provide the student and parent with a more complete report of the student as a learner than a traditional A-B-C-D-F system. The goal is to create grades that reflect not only what a student earns, but what the student knows and learns.

Competency: Rather than each student's education revolving around the accumulation of credits, the acquisition and demonstration of competencies are the focus. In a competency-based model, students are continually assessed on a series of course-specific competencies - the big ideas-related to the skills to be learned through each course. Each competency is broken down into a smaller subset of specific skills and learning targets known as power standards. In some cases, competencies and indicators are common to more than one course. Rather than judge progress based on time spent in a class or scores on tests, quizzes, and other assignments, the focus is on the mastery of skills. The most important question is, "What do we expect students to know and be able to do?"

Formative Assessments \& Formative Practice, also known as practice and preparation, are assessments for learning. These assignments inform teachers, students and parents of where the student is in the learning process. They also allow for feedback opportunities to help the student improve and prepare for the summative assessments. The types of assignments that fall into this category include, but are not limited to:

- Homework
- Skill checks or quizzes
- Entrance/exit tickets
- First drafts of writing assignments
- Graphic organizers and brainstorming
- Informal observations of student work
- Pre-tests
- Logs or journals including practice logs

Summative Assessments are assessments of learning. These assessments allow teachers to measure the level of student achievement of a standard(s). The types of assessments that fall into this category include, but are not limited to:

- Tests
- Projects
- Presentations
- Performance Assessments
- Writings (papers, essays, stories, lab reports, summaries, etc.)
- Authentic learning tasks (real word applications \& problem solving)

Rather than simply testing and moving on as in a traditional system, students are also required to show their ability in every competency in order to pass a class and move on.

Teachers enter grades for one or more related competencies with each summative assessment; they do not enter competency grades for formative assessments. Competencies are graded on a 4-point scale and that averages out as follows:

Work Study Practices: Separated from the assessment of students' academic knowledge and skill in a particular course, assessment of work study practices focuses on identifying skills and dispositions that are the most significant contributors to a successful learning experience. Students are recognized as individual learners developing skills and dispositions that transfer to all their learning experiences. The assessment of a student's achievement in these areas is part of single assessments, and develops across an entire course. As these are skills needed to learn effectively, and separate from the student's level of achievement academically, these grades are shown alongside, but do not contribute to competency and overall course grades. Work Study Practices are not subject-specific. As a result, teachers in all courses during a student's high school experience assess their developing skills in each of four areas-Communication, Creativity, Collaboration, and Self-Direction. These assessments are combined over time into an ever-changing representation of a student's current skill level in each. Similar to the four-point rubric used for academic grades, teachers use a four-point rubric to assign work-study practice grades at the assignment level, at the unit level, or on a quarterly basis.

## GRADUATION REQUIREMENTS

| Courses | Raymond High School <br> Diploma | Raymond High School <br> Honors Diploma |
| :--- | :---: | :---: |
| English | 4 | 4 |
| Math | 3 | 3 |
| Social Studies | 2.5 | 2.5 |
| Science | .50 | 3 |
| Fine \& Performing <br> Arts | .50 | .50 |
| Health | 1 | .50 |
| Computers | 1 | 1 |
| Physical Education | 8.50 | 1 |
| Electives | 0 | 10 |
| World Language | 0 | 2 |
| ELO/Online Learning | 24 | .50 |
| Total | 28 |  |

*Honors Diploma - Students must earn 28 credits, have taken 2 years of consecutive world language and must maintain a minimum grade point average (GPA) of 3.27 or higher.


## ATHLETICS AND CO-CURRICULAR ACTIVITIES

Extracurricular Activities
Raymond High School sponsors the following activities

| Art Connections | Drama | Math Team | RHS Site Council |
| :--- | :--- | :--- | :--- |
| Band | Financial Literacy | National Honors Society | Robotics |
| Book Club | Gay/Straight Alliance <br> (GSA) | Raymond Coalition for <br> Youth (RCFY) | Student Athletic <br> Leadership Team <br> (SALT) |
| Chorus | Granite State Challenge | Raymond Police <br> Explorers | Student Council |
| Cinematography | Interact Club | Reach High Scholars | Yearbook |

Interscholastic Sports

| Baseball | Cross Country | Spring Track | Unified Spring Track |
| :--- | :--- | :--- | :--- |
| Basketball | Football | Volleyball | Wrestling |
| Bowling | Soccer | Winter Track |  |
| Cheerleading | Softball | Unified Basketball |  |

## SUGGESTED CORE COURSE OF STUDY

|  | ENGLISH | MATHEMATICS | $\begin{aligned} & \hline \text { SOCIAL } \\ & \text { STUDIES } \end{aligned}$ | SCIENCE | WORLD LANGUAGE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SELECTIVE <br> COLLEGE and MILITARY ACADEMIES | 4 credits <br> Including: <br> World Literature <br> American <br> Literature <br> Electives | 4 credits <br> Including: <br> Algebra I <br> Geometry <br> Algebra II <br> Honors <br> Pre-Calculus <br> AP Calculus | 4 credits <br> Including: <br> World History <br> Economics <br> Government <br> U.S. History <br> Social Studies <br> Electives | 4 credits <br> Including: <br> Physical Science <br> Biology <br> Chemistry <br> Physics <br>  <br> Physiology | 4 credits Strongly recommended that a student take 3 years of the same language: French Spanish |
| COLLEGE and CAREER READY | 4 credits <br> Including: <br> World Literature <br> American <br> Literature <br> Electives | 3-4 credits <br> Including: <br> Algebra I <br> Geometry <br> Algebra II <br> Honors <br> Pre-Calculus <br> Math Electives | 3 credits <br> Including: <br> World History <br> Economics <br> Government <br> U.S. History <br> Social Studies <br> Electives | 3 credits <br> Including: <br> Physical Science <br> Biology <br> Chemistry | 3 credits <br> Strongly recommended that a student take 3 years of the same language: <br> French Spanish |



## New Hampshire Scholars

All students, regardless of their post high school plans, are encouraged to follow the New Hampshire Scholars course of studies.

New Hampshire Scholars is part of the State Scholars Initiative, a national program that uses business leaders to motivate students, beginning in Grade 8, to complete a rigorous course of studies in high school one. This program will give them a boost in college and careers.

New Hampshire Scholars encourages and motivates all high school students to complete a rigorous course of study that prepares them for successful transition to college coursework or technical training necessary to enter today's competitive job market.

Courses that meet New Hampshire Scholars requirements are designated with the symbol in the course description.

| Courses |
| :--- |
| English -English SH Sholars <br> World Literature, American Literature, English Electives 4 credits 4 credits 4 credits <br> Mathematics - Algebra I, Algebra II, Geometry, and one <br> other competency 4 credits 4 credits 4 credits <br> Science - Including 3 years of Labs chosen from <br> Biology, Chemistry, and Physics, and others approved <br> by individual schools 3 credits 4 credits 3 credits <br> Social Studies - Chosen from U.S. History, World <br> History, World Geography, Economics, Government, <br> Psychology and others as approved by individual <br> schools 3.5 credits 3.5 credits 3.5 credits <br> Languages - Two years of the same language other <br> than English 2 credits 2 credits 2 credits <br> STEM- At least one more year chosen from <br> Technology, Engineering, Computers, Advanced <br> Manufacturing, Science, Math, CTE Program, Project <br> Lead The Way, and others as approved by individual <br> schools  1 credit  <br> Arts - Chose from Visual Arts, Fine Arts, Performing <br> Arts, Music, Graphic Design, and others as approved <br> by individual schools    |

## Raymond High School 4-Year Personal Academic Planner

Student Name: $\qquad$ Y.O.G. $\qquad$

|  | Freshman Courses | Sophomore Courses | Junior Courses | Senior Courses |
| :---: | :---: | :---: | :---: | :---: |
| English |  |  |  |  |
| MATH |  |  |  |  |
| SCIENCE |  |  |  |  |
| SOC. STUDIES |  |  |  |  |
| ART |  |  |  |  |
| COMPUTER |  |  |  |  |
| PHYS. ED. |  |  |  |  |
| HEALTH |  |  |  |  |
| Elective |  |  |  |  |
| Elective |  |  |  |  |
| Elective |  |  |  |  |
| Elective |  |  |  |  |
| Elective |  |  |  |  |
| CREDIT | Grade 9: | Grade 10: | Grade 11: | Grade 12: |
|  | TOTAL CRE <br> ploma - 28 Credits (See | REQUIRED TO GRADUATE - 2 <br> uation Requirement Chart | Credits additional requiremen |  |
| 4.00 ENGLISH <br> 3.00 MATH | . 50 ARTS <br> 1.00 COMPUTER | 3.00 SCIENCE <br> 250 SOCIAL STUDIES | 1.00 PHYSICAL EDUCA <br> . 50 HEALTH 8.00 ELE |  |

## COURSE LEVEL DESCRIPTIONS

## COLLEGE \& CAREER READY

These courses are designed to prepare all students for success in college, careers, and other types of post secondary education opportunities. They will provide rigorous and relevant learning experiences that strengthen and expand students' knowledge and skills as part of a well rounded high school education. College \& Career Ready courses will emphasize application of transferable skills and knowledge that will prepare all students to thrive and meet the demands of a changing world after high school.

## HONORS

These courses are designed for students who desire to expand and deepen their learning in a particular subject area. Honors courses have the same foundation as College and Career Ready courses, but offer more opportunities for in-depth or extended experiences that require the application and synthesis of high level skills and knowledge in the content area. Students who desire admission to a very competitive college, have very strong skills in the subject area, or whose future career goals will be furthered through Honors level study should consider enrolling in Honors level courses.

## HONORS BY EXHIBITION

Honors by Exhibition courses are intended for students who seek to engage in Honors level study in a particular subject area, but whose schedules will not allow them to enroll in the Honors course offered during the school day or who seek Honors level study in a specific course of study that is available only at the College \& Career Ready level. Students enrolled in a College \& Career Ready course may opt to take that course for Honors credit through an Honors by Exhibition contract. In addition to being successful in the classroom, the student must commit to work with the teacher to develop a plan to extend or deepen their learning beyond the standard course requirements to ultimately demonstrate, or exhibit, that they have earned Honors credit. Honors by Exhibition plans can be highly individualized to the interests of the student in the context of course requirements. Students who choose to engage in an Honors by Exhibition course must be able to work independently as necessary to complete extended course requirements agreed upon in the Honors by Exhibition Contract.

## ADVANCED PLACEMENT

Advanced Placement courses enable students to pursue college-level studies while still in high school. These very rigorous courses are designed for students interested in applying to the most highly competitive colleges or post secondary education programs, or for those who have a notable area of strength in a subject area that they wish to develop further. Each AP course is modeled upon a comparable college course, and college and university faculty play a vital role in ensuring that AP courses align with college-level standards. These courses emphasize higher-order thinking skills, independent and self directed research, and stress problem-solving in multidisciplinar contexts. The curriculum and pacing of these classes are dictated by the College Board. Students in Advanced Placement classes are required to take the AP exam in the spring.

## HONORS BY EXHIBITION CONTRACT

Course Title: $\qquad$
Instructor: $\qquad$
School Year: $\qquad$
Details of the Honors by Exhibition option must be included below or the plan must be attached to this document.

To earn honors credit for this course, both student and instructor agree that the following personalized learning activities will fulfill the requirements to demonstrate Honors level achievement (reference required components on page 2, section 2 of the Honors by Exhibition Contract description).

I, $\qquad$ (student name), desire to take this course for honors credit through the Honors by Exhibition option. I understand that the rigor and workload will be greater than the students who are not taking the course for honors credit. I also understand that if I, at any progress or marking period, do not fulfill the standard requirements of the course by earning a passing grade, I will be dropped from the Honors by Exhibition option in this class. I also understand that I must successfully complete all aspects of my personalized and formally approved Honors by Exhibition option in order to receive an honors designation on my transcript for this course.

Student name: $\qquad$
Student signature: $\qquad$ Date: $\qquad$
Parent or Guardian name: $\qquad$
Parent or Guardian signature: $\qquad$ Date: $\qquad$

Teacher name: $\qquad$

Teacher Signature: $\qquad$ Date: $\qquad$
Department head name: $\qquad$
Department head signature: $\qquad$ Date: $\qquad$
Administrator name: $\qquad$
Administrator signature: $\qquad$ Date: $\qquad$

## PROSPECTIVE ADVANCED PLACEMENT STUDENTS AND THEIR PARENT/GUARDIAN

All Advanced Placement students are required to take the AP exam as an integral part of their experience in the course. The College Board and your child's teachers have carefully designed these intensive college-level classes with the intent that the AP exam be the culminating activity. In a very few extraordinary circumstances there may be a student who does not take the AP test. Please note that a student who fails to take the AP exam in May will be awarded honors-level credit (on a 5.33 scale) rather than AP-level credit (on a 6.33 scale). This will not change their actual course grade, but may affect their GPA and/or class rank. We want to give our strongest recommendation that all students take the AP exam.

The College Board assesses approximately a $\$ 91.00$ fee for each Advanced Placement exam. The fee must be paid prior to the exam date in May of the examination year. A reminder will be sent home in advance. Checks should be made out to Raymond High School. The College Board also charges a \$13.00 handling fee for any exam which is ordered but is not taken. If a student fails to take the exam for any reason, once it has been ordered, she/he will be charged for the handling fee, and must pay it before graduation. Students experiencing financial hardship should speak to their School Counselor.

Each student and their parent/guardian must sign and return this form to their AP teacher during the first week of class.

We have read and understand the information regarding the AP exam expectations for Raymond High School as outlined in the Program of Studies.

AP Course(s) to be taken: $\qquad$

## Student Name (please print)

Parent/Guardian Name (please print)

Student Signature

Parent/Guardian Signature

Today's date: $\qquad$

## College Credit Options

## Virtual Learning Academy Charter School Early College Program

The Virtual Learning Academy Charter School (VLACS) Early College Program offers students the opportunity to earn college credit and potentially an associate degree while attending high school! The idea is that students have the capability to meet the rigorous intellectual challenges posed by college level work, especially when motivated by the opportunity to save time and money. Currently (December 2018) the following classes are offered through VLACS for college credit.

| American Politics - POL 210 <br> (SNHU) | English Composition 1 - <br> ENG 122 (SNHU) | $\begin{aligned} & \text { Introduction to Humanities } \\ & \text { II - FAS } 202 \text { (SNHU) } \end{aligned}$ | $\begin{aligned} & \text { Pre-Calculus - MAT } 140 \\ & \text { (SNHU) } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Applied Finite Mathematics $\text { - MAT } 130 \text { (SNHU) }$ | English Composition 2 - <br> ENG 123 (SNHU) | Introduction to Information Technology - IT 100 (SNHU) | Principles of Physical <br> Science - SCI 212 (SNHU) |
| Calculus-MAT 210 (SNHU) | English Composition - <br> ENGL101C (estart) | Introduction to Philosophy <br> - PHIL 210 (SNHU) | Psychology, Introduction to - PSYC111W (eStart) |
|  <br> Development-ECE 155C <br> (eStart) | Human Growth and <br> Development - PSYC112W <br> (eStart) | Medical TerminologyHLTH101C (eStart) | Public Speaking - COM 212 <br> (SNHU) |
| $\begin{aligned} & \text { Creative Writing - ENG } 226 \\ & \text { (SNHU) } \end{aligned}$ | Introduction to Java <br> Programming - CIS148G <br> (estart) | Music, Introduction to MUSC105C (eStart) | $\begin{aligned} & \text { Statistics - MATH251C } \\ & \text { (eStart) } \end{aligned}$ |
| $\begin{aligned} & \text { Criminal Justice - JUS } 101 \\ & \text { (SNHU) } \end{aligned}$ | Introduction to <br> Communications - COM <br> 126 (SNHU) | $\begin{aligned} & \text { PC Applications - IST102C } \\ & \text { (eStart) } \end{aligned}$ | Topics in Applied College <br> Math - MATH120C (estart) |
| $\begin{aligned} & \text { Early World Literature - LIT } 201 \\ & \text { (SNHU) } \end{aligned}$ | Introduction to Humanities I-FAS 201 (SNHU) | Personal Financial PlanningFIN 250 (SNHU) | $\begin{aligned} & \text { US History 1: 1607-1865- HIS } \\ & \text { 113 (SNHU) } \end{aligned}$ |

## Special Education

The Special Education Department at Raymond High School is designed to provide support and/or services to students that meet the criteria. In order to determine if a student has met the criteria they need to be evaluated or assessed. Once the student has met the criteria, they are provided with specialized instruction. As needed, in accordance with Individualized Education Plans; students will be provided with accommodations or modifications. These accommodations/modifications afford the students an opportunity to access the general curriculum and gain educational benefit.

The clear intent of each of the programs is to ensure that all students are challenged to excel, to progress within the regular education curriculum and to prepare them to be college and career ready. Each of the programs offered encompasses one or more of the components listed below:

1) Support services to enhance students' individual performance.
2) Development and refinement of social, interpersonal, and behavioral skills needed to function effectively in the school setting, social milieu, and society.
3) Tools to promote and strengthen advocacy strategies.
4) Transitional plans to facilitate a smooth progression from school to post-graduate opportunities.

The Special Education team uses three integrated steps to ensure that the unique needs of the students are addressed. In addition, the team is bound by law to ensure full compliance with district, state, and federal requirements:

1) Eligibility Determination which begins with the referral process and, if the criteria is met, ends with a thorough evaluation of the student in all areas of suspected disability.
2) Development of the Individual Education Program (IEP) - If the team, including but not limited to the student and parents, general educators, evaluator(s) and special educators, finds the student eligible for special education, the elements of an IEP are discussed, planned and established in the written document. The evaluation and eligibility process occurs triennially.
3) Placement Decisions - Once the IEP is determined, proper placement is determined by the team.

The courses that are offered, through the special education department, are designed to support and assist students in their identified areas of concern, with their class work, and their assignments/projects. Students are taught various study skills and strategies to help them perform successfully in regular education classes. Organization skills are also emphasized to enhance the students' ability to keep track of class work, homework, and notes.

## Protocol for Student Course Changes

All students in grades 9-11 must be enrolled in 7 courses each semester. Seniors who are on schedule with credits for graduation must be scheduled in a minimum of 6 courses each semester. However, some parents and guardians may feel that a study hall in their child's schedule would be beneficial. If you wish for your child to only be enrolled in one fewer class for the upcoming semester, please request a waiver form from the School Counselors' Office. The add/drop period will be within the first five school days of each semester. Any student dropping classes after the add/drop time period will have a WF (withdrawal fail) or a WP (withdrawal pass) on their transcript.

Parent-requested schedule changes are reserved for serious reasons and must be approved by an administrator and the affected teacher(s).

| NH Scholars courses that meet New Hampshire |
| :--- | :--- |
| Scholars requirements |

## Freshman Academy

The Freshman Academy team of teachers is comprised of one member of each of the core subject areas, one special education case manager, and one member of the school counseling office. The Freshman Academy team is the only cross-curricular collaborative team at RHS. The goal of the Academy is to ease the transition from middle school to high school. The Academy structure will help foster a sense of belonging, improve student attendance and achievement, develop stronger student-teacher relationships, and provide opportunities to team teach.

## Freshman Seminar

Required for Freshmen
. 50 credit 1/semester
Grade 9

Freshman seminar is a course designed to promote a successful transition between middle school and high school. Preferably taught by Freshmen High School teachers, the course provides students with opportunities for academic enrichment and assistance, as well as the chance to improve organizational and communication skills. Since every freshman is in a seminar class, it provides the perfect venue for sharing information, touching base with goals and grades, and participating in common school activities. In addition, part of the course is dedicated to future planning and course selection.


# HUMANITIES DEPARTMENT English 

RHS Graduation requirements: World Literature 1 credit, American Literature 1 credit, Junior Electives 1 credit, Senior Electives 1 credit
State Graduation Requirement: 4 English credits

| GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 |
| :---: | :---: | :---: | :---: |
| World Literature, <br> Honors World <br> Literature | American <br> Literature,Honors <br> American Literature | English Electives ${ }^{*}$, AP <br> English Literature | English Electives ${ }^{*}$, AP English <br> Literature |

*Courses offered during school years beginning with an even number.
**Courses offered during school years beginning with an odd number.

## World Literature <br> Required for Freshmen 1 credit/full year <br> Grade 9



This course provides students with a survey of world literature which will delve into a selection of works from many eras and diverse cultures. Students will read a selection of novels, stories, poetry and drama in detail, will discuss in small and large groups, and will write extensively about their reading. Students will be assessed on a frequent basis. Assessments will include quizzes, tests, projects and essays Students will also be given opportunities to produce creative projects in response to the literature. Vocabulary study, oral presentations, and responses to relevant film and audio resources will all be components of the course.

## Honors World Literature

Recommendation: 80\% 2.5 or higher in previous English course 1 credit/full year
Grade 9

This course provides students with a survey of world literature which will delve into a selection of works from many eras and diverse cultures. Students will read a selection of novels, stories, poetry and drama in detail, will discuss in small and large groups, and will write extensively about their reading. Students will be assessed on a frequent basis. Assessments will include quizzes, tests, projects and essays Students will also be given opportunities to produce creative projects in response to the literature. Vocabulary study, oral presentations, and responses to relevant film and audio resources will all be components of the course. Students will be required to complete additional summer reading assignments and to show a mastery of their reading upon their return to school.

## American Literature

Required for Sophomores
1 credit/full year
Grade 10-11
HAMPS/

This course covers several thematic units in which students will answer the essential question, "What does it mean to be American?" In each project-based unit, students will read a variety of fiction and nonfiction, participate in class discussions, and write extensively in response to the readings. Work will also include other nonfiction essays and creative writing, as well as oral presentations and projects.

## Honors American Literature

Recommendation: 80\% 2.5 or higher in previous English course 1 credit/full year
Grade 10-11


This course covers several thematic units in which students will answer the essential question, "What does it mean to be American?" In each project-based unit, students will read a variety of fiction and nonfiction, participate in class discussions, and write extensively in response to the readings. Work will also include other nonfiction essays and creative writing, as well as oral presentations and projects. Students will be required to complete additional summer reading assignments and to show mastery of the material upon their return to school.

## Advanced Placement English Language \& Literature

Recommendation: $80 \% 2.5$ or higher in previous Honors English course 1 credit/full year
Grades 11-12


This college-level course will engage students in the careful reading and critical analysis of a wide variety of literature. This will include an intensive focus on many genres and periods. Intensive critical examination, interpretation, and evaluation will be expected throughout the course through daily class discussions and extensive written analysis. Students in AP should be very strong readers and writers. Summer reading is required; students will be required to show mastery of the material upon their return in the fall. NOTE: STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their guidance counselor.)

## World Mythology*

. 50 credit/1 semester
Grade 11-12


In this course students will study a variety of myths and legends from diverse cultures around the world. We will explore common themes and characters across cultures and time periods. Reading and comprehension strategies will be emphasized with each literary selection, and writing assignments will be developed from within the context of the reading. Essays, journals, creative projects, quizzes, and a final project or exam will comprise the performance assessments for the course.

```
British Literature**
. }50\mathrm{ credit/1 semester
Grade 11-12
```

NCA


A wide variety of works by authors from Great Britain and the British Empire will be the focus of this course. Novels and essays will span a period from the Victorians to contemporary works. We will read extensively, discuss in small and large groups, and write in a variety of forms from response journals to analysis essays. Students will have some choices about their selected readings and their summative assessments for British Literature.

## Creative Writing

.50 credit/1 semester Grade 11-12


Creative Writing is a one-semester course focused on writing a variety of pieces, including descriptive, narrative, and memoir writing. Students will also read contemporary essays, short stories, and poems as examples and learn various ways to tap their inherent creativity. This course is taught in a workshop environment, which includes sharing of work, peer editing, self-assessment, and frequent student-teacher conferences in a supportive environment. Independence in creating and meeting deadlines is essential for students in this course. Journals and electronic portfolios are required. Evaluation will include an assessment of the semester writing portfolio.

## Expository Writing

. 50 credit/1 semester
Grade 11-12


This course requires students to develop papers in the four modes of discourse (narration, description, persuasion, and exposition) in a writing workshop setting; this means we will focus on the process of writing through reading models, discussion, outlining, drafting, and peer editing. Student work will be shared among classmates in a workshop environment. Self-assessment and frequent student-teacher conferences foster a supportive environment. Independence in creating and meeting deadlines is essential for students in this course. Journals and electronic portfolios are required. Evaluation will include an assessment of the semester writing portfolio.


This course requires students to develop papers in the four modes of discourse (narration, description, persuasion, and exposition) in a writing workshop setting; this means we will focus on the process of writing through reading models, discussion, outlining, drafting, and peer editing. Student work will be shared among classmates in a workshop environment. Self-assessment and frequent student-teacher conferences foster a supportive environment. Independence in creating and meeting deadlines is essential for students in this course. Journals and electronic portfolios are required. Evaluation will include an assessment of the semester writing portfolio.

## Film as Literature**

.50 credit/1 semester
Grade 11-12


Students will view and analyze a variety of current and classic films that have made a lasting impression and are representative of culturally significant themes. Students will become familiar with film language and the storytelling techniques of film. The goals of the course include: 1) teaching students how to analyze films as texts and modern non-fiction; 2) preparing students to be active, critical thinkers in our modern American society; 3) reinforcing the knowledge of literary devices as students analyze elements of plot, setting, conflict, theme, character development, mood and motifs in film.

## Honors Media Studies**

Recommendation: 80\% 2.5 or higher in previous English course .50 credit/1 semester
Grade 11-12

This course will encompass elements of print, electronic, and social media including the development and evolution of traditional and contemporary media forms. We will study various forms of media as a mirror of our culture and values. Advertising, political concerns, news media, and social media will be areas of particular focus. Students will read and write extensively and regularly. Students should be strong readers and writers, and self-directed learners; we will further develop those skills throughout the semester. NOTE: This course is entirely electronic; all instructional materials are accessed online and all assignments are submitted through Google apps. Access to the Internet both in and out of school is essential for success.


## Public Speaking*

. 50 credit/1 semester
Grade 11-12


This course will introduce students to the principles of effective communication through presentations. Students will prepare and deliver at least five speeches, perform weekly impromptu exercises, and will participate in at least one debate. Students will be required to critique coursework through both peerand self-evaluations. Research skills will be developed and used throughout the course. Full participation and consistent attendance is an integral part of a student's successful completion of this course.

## Popular Literature*

.50 credit/1 semester
Grade 11-12


Readings in this course will come from a variety of fiction genres in both the short story and novel form. Work will also focus on author biographies and contemporary essays on popular fiction. Frequent written responses, critical analysis, and active participation in discussion are required. This course will emphasize competency in reading and writing, and encourage critical thinking and listening skills. Response journals, class discussion, and self-assessments are required.

```
Honors Popular Literature*
Recommendation: 80% 2.5 or higher in previous English course
. }50\mathrm{ credit/ }1\mathrm{ semester
Grade 11-12
```

Readings in this course will come from a variety of fiction genres in both the short story and novel form. Work will also focus on author biographies and contemporary essays on popular fiction. Frequent written responses, critical analysis, and active participation in discussion are required. This course will emphasize competency in reading and writing, and encourage critical thinking and listening skills. Response journals, class discussion, and self-assessments are required.

# HUMANITIES DEPARTMENT Social Studies 

RHS Graduation Requirements: World History .50 credit, Economics .50 credit, Government .50 credit, U.S. History 1 credit. State Graduation Requirements: World History . 50 credits, Economics .50 credit, Government . 50 credit, U.S. History 1 credit.

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :--- | :--- | :--- | :--- |
| World History <br> Geography | US History <br> World Geography | Government <br> Economics | Social Studies <br> Electives |
| Honors World History <br> Honors Geography | Honors World <br> Geography | Honors US History <br> AP US History <br> Honors Government <br> Honors Economics | Social Studies <br> Electives |

*Courses offered during school years beginning with an even number.
**Courses offered during school years beginning with an odd number.

```
World History
1 credit/1 full year Grade 9
```



World History is strongly recommended for all first year students. The purpose of this course is to enable students to understand their connections to the development of civilizations by examining the past to prepare for their future as participating members of a global community. This course is designed to provide students with a broad understanding of the economic, political, technological, religious and social developments that created the western civilization.
This course includes an examination of the Renaissance and the Reformation; European Colonial Expansion to Africa, Asia and the Americas; the Age of Absolutism; Enlightenment; the French Revolution; the Industrial Revolution; Nationalism in Europe; the New Imperialism; WWI and the Russian Revolution and the Rise of Totalitarianism and Democracy.

## Honors World History

Recommendation: Teacher Recommendation 1 credit/full year
Grade 9


Honors World History is strongly recommended for self motivated learners. The purpose of this course is to enable students to understand their connections to the development of civilizations by examining the past to prepare for their future as participating members of a global community. This course is designed to provide students with a broad understanding of the economic, political, technological, religious and social developments that created the western civilization.

This course includes an examination of the Renaissance and the Reformation; European Colonial Expansion to Africa, Asia and the Americas; the Age of Absolutism; Enlightenment; the French Revolution; the Industrial Revolution; Nationalism in Europe; the New Imperialism; WWI and the Russian Revolution and the Rise of Totalitarianism and Democracy.


Economics is the study of choices and decisions people make about how to use the world's resources. This course will help the student make informed decisions about their financial resources. They will gain an understanding of the relationship between economic concepts and real-world economic events affecting all people in the global economy. Included in Economics is the study of the American free enterprise system, government intervention in our economy, supply and demand, inflation, unemployment, business structures, the Stock Market, money and banking, and personal finance.

## Honors Economics

Recommendation: 80\% 2.5 or higher in previous Social Studies course
.50 credit/1 semester
Grades 11-12

Economics is the study of choices and decisions people make about how to use the world's resources. This course will help the student make informed decisions about their financial resources. They will gain an understanding of the relationship between economic concepts and real-world economic events affecting all people in the global economy. Included in Economics is the study of the American free enterprise system, government intervention in our economy, supply and demand, inflation, unemployment, business structures, the Stock Market, money and banking, and personal finance.

## Government <br> .50 credit/1 semester <br> Grades 11-12



Government is an essential and foundational social studies course with primary emphasis on the functioning of national, state and local government institutions. Other topics covered in this survey course include the US Constitution and the American legal system, current issues of concern to the United States, values and decision making techniques, propaganda and persuasion techniques, political parties and the voting process.

Honors Government is an essential and foundational social studies course with a concentration on the United States Constitution and the Bill of Rights, and their effects on everyday life. Additional emphasis will be placed on the functioning of national, state and local institutions; the American legal system; current issues of concern to the United States; values and decision-making techniques; propaganda and persuasion techniques; and political parties and the voting process. All honors level government students will demonstrate advanced skills in oral and written communication. In addition they will be expected to do a research paper, documents based readings, and participate in case studies, debates, and participate in a major project.

## United States History

1 credit/full year
Grade 10

U.S. History explores the role of the United States in the 20th century. The major themes of the U.S.H. are domestic policy and foreign policy. Within these broad areas students will use modern technology as well as traditional methods to develop a comprehensive background of significant events. These include: domestic and international expansion, Constitutional changes through the 20th century, technology and the growth of the middle class, Depression and Recovery, World War II era, the growth of the United States as a global superpower, the post-World War II era. This course is recommended for those students who seek an intense academic setting or have a passion for history.

## Honors United States History

Recommendation: 80\% 2.5 or higher in previous Social Studies course 1 credit/full year
Grade 10

Honors U.S. History explores the role of the United States in the 20th century. The major themes of the H.U.S.H. are domestic policy and foreign policy. Within these broad areas students will use modern technology as well as traditional methods to develop a comprehensive background of significant events. These include: domestic and international expansion, Constitutional changes through the 20th century, technology and the growth of the middle class, Depression and Recovery, World War II era, the growth of the United States as a global superpower, the post-World War II era. This course is recommended for those students who seek an intense academic setting or have a passion for history.

```
Advanced Placement United States History**
Recommendation: 80% 2.5 or higher in previous Honors Social Studies
course
and teacher recommendation
1 credit/full year
Grades 11-12
```

The Advanced Placement Program course and examination in United States History is a one-year program that is intended for qualified students who wish to complete studies in secondary school equivalent to college introductory courses in U.S. History.
The AP program in United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history.
Students should learn to assess historical materials - their relevance to a given interpretive problem, their reliability, and their importance - and to weigh the evidence and interpretations presented in historical scholarship.

An AP United States History course should thus develop the skills necessary to arrive at conclusions on the basis of the informed judgment and to present reasons and evidence clearly and persuasively in essay format. Also, students may be eligible for dual enrollment status at SNHU, potentially earning 6 college credits. NOTE: STUDENTS ARE REQUIRED TO TAKE THE AP EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their guidance counselor.)

## Anthropology** <br> .50 credit/1 semester Grades 11-12



This one semester elective course is an opportunity to explore different groups of people: who, where, when, and why. As with history, some of these societies may be from other millennia or centuries, and as with current events, these groups may be from the 20th or 21st century. Each society is studied through four main areas (domains): cultural (beliefs and customs), biological (physical traits), linguistic (language), and archeological (tools, artifacts). Some of the groups studied in prior years include soccer players from Tanzania, 17th century colonists, and RHS graduating seniors from 1918 to the present using RHS Yearbooks as an exploratory tool.

## In The News

.50 credit/1 semester
Grades 11-12

This course focuses on many of the issues confronting American Society in the 21st century. Topics will be studied, debated, and evaluated with regards to their relevance at the time the course is being historically relevant. Potential topics include: Gun Control/School Shootings, Abortion, Illegal Immigration, Welfare, Defense Spending/Government Waste, Drug Legalization, Affirmative Action, Gay Rights, Environmental Issues, the Death Penalty, Physician Assisted Suicide, and Universal. The course will have a seminar structure with an emphasis on discussion. Students are expected to successfully complete primary and secondary source readings and conduct research using a variety of print, media, and technological sources.


This one semester elective course is offered to provide students an overview of the criminal justice system with an emphasis on New Hampshire statutes. Because of the real time nature of the subject matter, students rely on primary sources for instruction and research. The NH Criminal Code is accessed throughout the course to develop an understanding of the laws that govern daily life and ensure that we are a nation of laws and not individuals. To support this concept, a thorough examination and understanding of case law is pursued. As part of our examination of the criminal justice system, due process rights are carefully identified and explored. Throughout the semester, the U.S. Constitution is referenced for understanding and perspective.

```
Criminal Law: True Crimes*
Prerequisite: Criminal Law
. }50\mathrm{ credit/1 semester
Grades 11-12
```



Criminal Law: True Crimes is designed to be a high interest and informative continuation of criminal law studies. The course foundation is built upon prior knowledge from Criminal Law for an in depth examination of both New Hampshire and national crimes of interest. All aspects of criminal activity will be examined including motive, victim impact, role of law enforcement, penalties and consequences, as well as Constitutional considerations.

## Civil Law

.50 credit/1 semester
Grades 11-12


Civil Law is an overview of the day-to-day legal situations which face all of us at one time or another. Emphasis is placed on New Hampshire interpretation of civil law. Course content includes the following areas: Family Law (marriage, parenting, and divorce), Tort Law (negligence, intentional wrong, strict liability), Finance Law (credit and contracts), Estate Law (probate and inheritance), Bankruptcy Law, Housing Law and Tax Law. An examination of these legal areas will involve a variety of resources and examination of important court cases.

## History of Religions*

.50 credit/1 semester Grades 11-12

This course explores the interconnecting role of religion and world politics. The role of religion in government and global politics is universal and it is the mission of this course to instill a basic understanding of world religions, including Buddhism, Christianity, Hinduism, Islam, and Judaism. With the religious background, an examination of historic and current global issues and conflicts will be examined.

## Political Science**

.50 credit/1 semester Grades 11-12


Political Science is a fast-paced examination of the United States' role in world affairs. This course, offered to juniors and seniors, will provide an opportunity to explore and discuss America's military commitment in foreign countries as well as the priorities that the United States faces in our own country. Special consideration will be given to immediate political issues and the background that drives our nation's responses. This class is encouraged for those students who believe that the country belongs to the people and that the people have a responsibility to be knowledgeable in the affairs of government.

## Holocaust and Genocide Studies**

. 50 credit/1 semester
Grades 11-12

What drives an ordinary person to commit atrocities? How does the world stand by and do nothing as mass-killings occur? Why are victim groups chosen? How do victim groups fight back? How does the rest of the world respond? All these questions will be looked at in class. Primary source analysis and film will be used to deliver content. Students will be assessed using inquiry projects, persuasive essays and research papers, formal debates, quizzes and tests on the historical events. Topics that will be covered: Armenian Genocide, Holocaust, Cambodian Genocide, Genocide of Indiginous Peoples, Rwandan Genocide, and current conflicts.

## Psychology*

.50 credit/1 semester
Grades 11-12


This course is an introduction to the science of human behavior. Major emphasis will be placed on child development, learning and cognition, the mind, memory, discussing mature topics and preparing independently for major discussions, debates and presentations. This course will give students the opportunity to gain insight into their own lives and behavior, while requiring advanced reading and critical thinking skills.


This course is an introduction to the study of human society. Students will learn about the impact of society and culture on individuals and about the role of individuals in the construction of social life and culture. The main topics to be covered include: culture, socialization, deviance, social stratification, race \& ethnic relations, gender \& age inequalities, and social institutions (family, religion, sport). A central focus of the course is understanding the nature of the individual in society.

## Advanced Placement American Government and Politics <br> Recommendation: $80 \% 2.5$ or higher in previous Social Studies course and teacher recommendation 1 credit/full year <br> Grades 11-12



This is a year-long study of the American political system. It will be an intensive, in-depth examination of the institutional and non-institutional factors that make the American government unique in the world. To better understand these factors, we will study the historical background which has influenced over two centuries of American political evolution. As you internalize the concepts taught in this course you will, in the short term, prepare to pass the national AP American/Comparative Government examination in May. More importantly, however, is the long term benefit. Our success as a democracy depends on your understanding of and participation in the government process. After all, freedom isn't free! NOTE: STUDENTS ARE REQUIRED TO TAKE THE AP EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their guidance counselor.

## World Geography

$.50 \mathrm{credit} / 1$ semester
Grades 11-12


To ensure that students have an awareness and understanding of their world both politically and environmentally, this half credit course is required of all Raymond HIgh School graduates beginning with the Class of 2024.This one semester course meets the state requirement for world studies. It is a hands-on course that utilizes computer inquiry, media resources, as well as primary source documents. This course examines the seven continents through the five themes of geography. This thematic approach introduces and reinforces the five themes (Location, Region, Place, Movement, and Human Interaction). Students will have a working knowledge of the themes and their application by the end of the course. Selection of the continents to be examined is based on current events, interest, and time.

## Honors World Geography

. 50 credit/1 semester
Grades 11-12


To ensure that students have an awareness and understanding of their world both politically and environmentally, this half credit course is required of all Raymond HIgh School graduates beginning with the Class of 2024. This course builds upon the five themes of geography to explore the earth and our role of stewardship of it. This exploration will utilize primary sources, multiple data reports for analysis and recommendations, and cultural exploration. Students will address the issues of resource awareness, scarcity, and allocation; the impact of daily life decisions on the environment; troubleshooting, identifying, and recommending possible solutions to protect the planet. Ultimately, students will develop an appreciation for the physical components of the world and their place in it.

# HUMANITIES DEPARTMENT Interdisciplinary Courses 

Humanities courses explore a specific period of history and culture through literature, the performing arts, and the fine arts. These courses apply towards Elective Credits required for graduation.

## Days of Change and Challenges: 1960s

. 50 credit/1 semester
Grades 11-12

Days of change and challenges; a bi-disciplinary study of US history and culture of the 1960s. This course examines the political, social and cultural trends, and milestone events throughout these sometimes tumultuous decades. Students will also study literature from the period to gain insight into ways authors' works are both a product of their times and a contributing influence upon them.

## Days of Change and Challenges: 1970s

.50 credit/1 semester
Grades 11-12


Days of change and challenges; a bi-disciplinary study of US history and culture of the 1970s. This course examines the political, social and cultural trends, and milestone events throughout these sometimes tumultuous decades. Students will also study literature from the period to gain insight into ways authors' works are both a product of their times and a contributing influence upon them.

Sports has become an escape for some, an opportunity for others, and entertainment for many. Sports in Society examines the role of competitive athletics at all levels. This examination includes the following areas: the history of sports; the impact of sports on local, national, and international economies; the psychological and societal effects on communities of people and organizations. This course is offered by a recognized sports historian and published author.


## SPECIAL EDUCATION

In the event that an IEP team agrees that the degree of specialized instruction needed warrants enrollment in alternative special education courses, and/or the pursuit of a Certificate of Attendance, the following courses are available through the Special Education Department and may be awarded elective credit as determined by the IEP Team and/or administration:

```
Reading & Writing Development I
Recommendation: IEP Team Approval
full year
Grade 9
```

Incorporating informational text, in addition to specialized and evidence-based instructional methods and materials, Informational Reading and Writing Development I further advances a student's reading decoding and comprehension skills, as well as receptive and expressive communication skills. NOTE: This course is an alternative to World Literature if a student has been determined eligible to pursue a Certificate of Completion.

```
Reading & Writing Development II
Recommendation: IEP Team Approval and the successful completion of Reading and Writing Development I
full year
Grade 10
```

Incorporating both literature and informational text, in addition to specialized and evidence-based instructional methods and materials, Reading and Writing Development II further advances a student's reading decoding and comprehension skills, as well as receptive and expressive communication skills. NOTE: This course is an alternative to American Literature if a student has been determined eligible to pursue a Certificate of Completion.

```
Informational Reading & Writing Development I
Recommendation: IEP Team Approval
full year
Grade 11
```

Incorporating informational text, in addition to specialized and evidence-based instructional methods and materials, Informational Reading and Writing Development I further advances a student's reading decoding and comprehension skills, as well as receptive and expressive communication skills. NOTE: This course is an alternative to English electives. if a student has been determined eligible to pursue a Certificate of Completion.

```
Informational Reading & Writing Development II
Recommendation: IEP Team Approval and the successful completion of Informational Reading and Writing
Development I
full year
Grade 12
```

Incorporating informational text, in addition to specialized and evidence-based instructional methods and materials, Informational Reading and Writing Development II further advances a student's reading decoding and comprehension skills, as well as receptive and expressive communication skills. NOTE: This course is an alternative to English electives available to seniors if a student has been determined eligible to pursue a Certificate of Completion.

```
Foundations of Math I
Recommendation: IEP Team Approval
full year
Grade 9
```

Incorporating specialized and evidence-based instructional methods and materials, Foundations of Math I advances a student's competencies in relation to numbers and operations, measurement and data, geometry, and algebraic thinking. NOTE: This course is an alternative to Pre-Algebra if a student has been determined eligible to pursue a Certificate of Completion.

## Foundations of Math II

Recommendation: IEP Team Approval and the successful completion of Foundations of Math I
full year
Grade 10

Incorporating specialized and evidence-based instructional methods and materials, Foundations of Math I further advances a student's competencies in relation to numbers and operations, measurement and data, geometry, and algebraic thinking. NOTE: This course is an alternative to Algebra if a student has been determined eligible to pursue a Certificate of Completion.

```
Consumer Math I
Recommendation: IEP Team Approval
full year
Grade 11
```

With an emphasis on the math skills required for employment and independence, and the incorporation of specialized and evidence-based instructional methods and materials, Consumer Math I advances a student's competencies in relation to numbers and operations, measurement and data, geometry, and algebraic thinking. NOTE: This course is an alternative to math electives if a student has been determined eligible to pursue a Certificate of Completion.

## Consumer Math II

Recommendation: IEP Team Approval
full year
Grade 12

With an emphasis on the math skills required for employment and independence, and the incorporation of specialized and evidence-based instructional methods and materials, Consumer Math II further advances a student's competencies in relation to numbers and operations, measurement and data, geometry, and algebraic thinking. NOTE: This course is an alternative to math electives if a student has been determined eligible to pursue a Certificate of Completion.

```
About My Community I
Recommendation: IEP Team Approval
half year
Grade 9 or 10
```

Incorporating specialized and evidence-based instructional methods and materials, About My Community I advances a student's knowledge of his/her home, school, and local communities. As appropriate, individualized instruction may also expand to increase knowledge of NH and the United States. Periodic actual or virtual trips into Raymond may occur. NOTE: This course is an alternative to the social studies courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion.

```
About My Community II
Recommendation: IEP Team Approval and the successful completion of About My Community I
half year
Grade 9 or 10
```

Incorporating specialized and evidence-based instructional methods and materials, About My Community II further advances a student's knowledge of his/her home, school, and local communities. As appropriate, individualized instruction may also expand to increase knowledge of NH and the United States. Periodic actual or virtual trips into Raymond may occur. NOTE: This course is an alternative to the social studies courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion.

```
Exploring My Community I
Recommendation: IEP Team Approval
half year
Grade 11 or 12
```

Incorporating specialized and evidence-based instructional methods and materials, Exploring My Community I further advances a student's knowledge of his/her home, school, and local communities. As appropriate, individualized instruction may also expand to increase knowledge of NH and the United States. Weekly actual or virtual trips into Raymond and surrounding communities will occur. NOTE: This course is an alternative to the social studies courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

```
Exploring My Community II
Recommendation: IEP Team Approval and the successful completion of Exploring My Community I
full year
Grade 12
```

Incorporating specialized and evidence-based instructional methods and materials, Exploring My Community II further advances a student's knowledge of his/her home, school, and local communities. As appropriate, individualized instruction may also expand to increase knowledge of NH and the United States. Weekly actual or virtual trips into Raymond and surrounding communities will occur. NOTE: This course is an alternative to the social studies courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

```
My Rights & Responsibilities
full year
Grade 11 or 12
```

Incorporating specialized and evidence-based instructional methods and materials, My Rights \& Responsibilities advances a student's knowledge of his/her rights and responsibilities upon turning 18 and beyond, (i.e., voting, guardianship, taxes, FERPA, disclosure of disability, Armed Services registration, medical and money management). Periodic actual or virtual trips into Raymond and surrounding communities may occur. NOTE: This course is an alternative to the social studies courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

## Studying Science I \& II

Recommendation: IEP Team Approval
full year
Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Studying Science I \& II advances a student's knowledge of the essential elements of physical science, life science, and Earth/space science. Periodic actual or virtual science-related experiences may occur. NOTE: These courses build upon each other, while remaining individualized, and are an alternative to the science courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion.

## Science in My Life

Recommendation: IEP Team Approval
half year
Grade 11 or 12

Incorporating specialized and evidence-based instructional methods and materials, Science in My Life advances a student's knowledge of the impact of physical science, life science, and Earth/space science on his/her own life. Periodic actual or virtual science-related experiences may occur. NOTE: These courses build upon each other, while remaining individualized, and are an alternative to the science courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

Art for Me I \& II
Recommendation: IEP Team Approval
half year
Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Art for Me I \& II advances a student's enjoyment and appreciation of art in his/her own life. Periodic actual or virtual art-related experiences may occur. NOTE: These courses build upon each other, while remaining individualized, and are an alternative to the Fine and Performing Art courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

## Technology for Me

Recommendation: IEP Team Approval
half year
Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Technology for Me advances a student's knowledge of the technology s/he uses to access the curriculum, express him/herself, regulate, and/or support executive functioning. NOTE: This course is an alternative to the ICT courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

## Healthy Habits I-IV

Recommendation: IEP Team Approval
half year
Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Healthy Habits I-IV advances a student's knowledge of his/her own health needs, habits, and responsibilities. Periodic actual or virtual health-related experiences may occur. NOTE: These courses build upon each other, while remaining individualized, and are an alternative to the Physical Education and Health courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

```
My Fitness I & II
Recommendation: IEP Team Approval
half year
Grade 9-12
```

Incorporating specialized and evidence-based instructional methods and materials, My Fitness I \& II advances a student's knowledge of his/her own fitness needs, habits, and options. Periodic actual or virtual fitness-related experiences may occur. NOTE: These courses build upon each other, while remaining individualized, and are an alternative to the Physical Education and Health courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

## Skill Building

Recommendation: IEP Team Approval
half year
Grade 9-12

Skill Building enables a student to address individualized educational access needs through the provision of a variety of related services. NOTE: This course can be repeated.

## Finding a Career I \& II

Recommendation: IEP Team Approval
full year
Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Finding a Career I \& II advances a student's knowledge of a variety of career fields while assisting him/her to identify career paths to explore further. Periodic actual or virtual career exploration experiences will occur. NOTE: These courses build upon each other, while remaining individualized, and are available only if a student has been determined eligible to pursue a Certificate of Completion. They can be repeated.

## Career Skills I \& II

Recommendation: IEP Team Approval
full year
Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Career Skills I \& II advances a student's knowledge of his/her own career interests, aptitudes, and abilities. Periodic actual or virtual career exploration experiences will occur. NOTE: These courses build upon each other, while remaining individualized, and are available only if a student has been determined eligible to pursue a Certificate of Completion. They can be repeated.

```
Indep. Study - Transitioning to Adult Life I & II
Recommendation: IEP Team Approval
full year*
Grade 12+
```

Transition to Adult Life I \& II are courses designed for the 18-21 year old student who is pursuing a Certificate of Attendance and striving to meet benchmarks required to achieve post-secondary goals. Daily actual or virtual community-based instructional and exploration experiences will occur. NOTE: These courses build upon each other, while remaining individualized, and are only appropriate if a student has been determined eligible to pursue a Certificate of Completion. They can be repeated. *Credit assignment is determined based on the hours of programming and determined by administration.

## STEM DEPARTMENT Mathematics

RHS Graduation Requirements: Algebra I 1 credit and 2 elective math credits and a class in which math is applied.
State Graduation Requirements: Algebra I 1 credit and 2 elective math credits and a class in which math is applied. 4th year math requirements meets the exposure requirements.

Mathematics Pathways

| Pre-Algebra | Algebra I | Honors Geometry | Honors Algebra I |
| :--- | :--- | :--- | :--- |
| Algebra I | Algebra II | Honors Precalculus | Honors Algebra II |
| Geometry | Quantitative Reasoning |  | Honors Precalculus |
| Advanced Mathematical <br> Foundations | Trigonometry |  | AP Calculus |
| Mathematics of <br> Construction | Probability and <br> Statistics |  |  |

RHS requires that every student take three years of math and an additional year of math or non-math class in which mathematics is significantly applied. According to ED 306.27, a student can meet the requirement by satisfactorily completing a minimum of 4 courses in mathematics or by satisfactorily completing a minimum of 3 mathematics courses and one non-mathematics content area course in which mathematics knowledge and skills are embedded and applied, as may be approved by the School Board.

Non-math department courses that meet the fourth year math requirement and are designated with the symbol in the course description.

## Pre-Algebra

Recommendation: Teacher Recommendation 1 credit/full year
Grade 9

Pre-Algebra Course Description: The goal of this course is to prepare students for success in Algebra I. This class will review the basic operations of arithmetic on whole numbers, fractions and decimals. These operations will be used in dealing with ratios, proportions, percents, simple geometry and algebra. As students master these basic concepts, they will move into basic algebra. Students will be expected to understand basic operations with integers, rational numbers, irrational, and real numbers; the use of variables; properties of numbers and of equality; solving equations and inequalities; problem solving; relations and functions; and polynomials.

## Algebra I

1 credit/full year
Grade 9-10

Algebra I prepares students for post-secondary school, the work force, and life in the information age. Designed for self-directed learners, it combines manipulatives, technology, and hands-on activities to explore increasingly difficult mathematical content. Content topics include writing, solving, graphing, creating equations and inequalities, interpreting and using functions to model a variety of situations, and data analysis and probability. Formal proof and abstract concepts are a focal point of the course in preparation for higher level mathematics.

```
Honors Algebra I
Recommendation: Grade of 80% 2.5 or higher in Eighth-Grade Math
1 credit/full year
Grade 9
```



Honors Algebra I provides pacing and rigor for students who are self-directed learners. The units of study include: modeling with functions, linear functions, linear equations and inequalities in one variable, linear equations and inequalities in two variables, quadratic functions, and data analysis/statistics. By the end of the course, students should be able to apply properties of real numbers and use units to solve problems; create, simplify, and solve algebraic expressions and equations; create models using functions and interpret functions; and summarize, represent, and analyze data.

## Geometry

Recommendation: Honors Algebra I or Algebra I 1 credit/full year Grade 10


In Geometry, formal proof and abstract concepts are a focal point of the course in preparation for higher level mathematics. Students will explore Euclidean Geometry (plane geometry) to build capacity in logical thinking, spatial reasoning, and applying algebraic concepts learned in Algebra I to new situations. Units of study include linear and angular relationships, polygons with a focus of quadrilaterals and triangles, measurement and dimension, and circles. By the end of the course, students will be able to solve a variety of problems involving congruence and similarity, right triangles and trigonometry, measurement and dimension, and coordinate geometry.

## Honors Geometry

Recommendation: Grade of $80 \% 2.5$ or higher in Algebra 1 1 credit/full year
Grade 9-10


Honors Geometry is designed for the self-directed learner as formal proof and abstract concepts are a focal point of the course in preparation for higher level mathematics. Students will explore Euclidean Geometry (plane geometry) to build capacity in logical thinking, spatial reasoning, and applying algebraic concepts learned in Algebra I to new situations. Units of study include linear and angular relationships, polygons with a focus of quadrilaterals and triangles, measurement and dimension, and circles. By the end of the course, students will be able to solve a variety of problems involving congruence and similarity, right triangles and trigonometry, measurement and dimension, and coordinate geometry. Pacing and in depth rigor distinguishes Honors Geometry from Geometry.

Algebra II<br>Recommendation: Geometry<br>1 credit/full year<br>Grades 10-11

(2id)

Algebra II is designed to provide a continuation and extension of the concepts and applications provided in Algebra I. The units of study include: modeling with functions, linear systems of equations in two/three variables, linear systems of inequalities, quadratic functions, exponential growth and decay and probability and statistics. By the end of the course, students should be able to apply properties of real numbers and use units to solve problems; create, simplify, and solve algebraic expressions and equations; create models using functions and interpret functions; and summarize, represent, and analyze data.

## Honors Algebra II

Recommendation: Grade of 80\% 2.5 or higher in Geometry and teacher recommendation 1 credit/full year


Grades 10-11

Honors Algebra II is designed for self-directed learners as formal proof and abstract concepts are focal points of the course. The course provides an in-depth study of nonlinear functions. Content topics include linear programming, quadratic, and polynomial functions in both real and complex numbers, exponential, radical, rational functions and an in-depth study of functions and their properties. By the end of the course, students should be able to apply properties of real numbers and use units to solve problems; create, simplify, and solve algebraic expressions and equations; create models using functions and interpret functions; and summarize, represent, and analyze data.

## Pre-Caleulus

Recommendation: Grade of $80 \%$ or higher in Algebra and teacher recommendation
4 eredit/fultyear
Grade-11-12


Pre-Calculus content topies include an in depth-study of trigonometry. Formal proof and abstract eoneepts are a foeal point of the course in preparation for ealeulus and college mathematies. By the end of this course, students will be able to prove and apply trigonometric functions and identities, create and analyze functions, compute vector operations, and apply sequences, series and linnits.

## Honors Pre-Calculus

Recommendation: Grade of 80\% 2.5 or higher in Algebra and teacher recommendation 1 credit/full year Grade 11-12

Honors Pre-Calculus is designed for self-directed learners. Content topics include an in-depth study of trigonometry. Formal proof and abstract concepts are a focal point of the course in preparation for AP calculus and college mathematics. By the end of this course, students will be able to prove and apply trigonometric functions and identities, create and analyze functions, compute vector operations, and apply sequences, series and limits. Pacing and rigor distinguishes Honors Pre-Calculus from Pre-Calculus.

```
Advanced Placement Calculus AB
Recommendation: Honors Pre-Calculus and teacher recommendation
Grade of \(80 \% 2.5\) or higher in Honors Pre-Calculus and teacher recommendation
1 credit/full year
Grade 12
```


$A P$ Calculus $A B$ is a college mathematics course with an extremely demanding and fast-paced curriculum. It is designed to replace the first semester calculus course (calculus I) in college if a satisfactory grade is achieved on the AP exam. It provides a foundation in differential and integral calculus. The topics studied include methods of differential calculus, integral calculus, applications of derivatives, integrals and limits. NOTE: STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their guidance counselor.)

## Probability and Statistics

Recommendation: Algebra II
50 credit/1 semester
Grades 11-12


This one-semester course will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: 1. Exploring Data: Describing patterns and departures from patterns 2. Sampling and Experimentation: Planning and conducting a study 3. Anticipating Patterns: Exploring random phenomena using probability and simulation 4. Statistical Inference: Estimating population parameters and testing hypotheses. Topics included are permutations, combinations, conditional probability, confidence intervals, hypothesis testing, measures of central tendency and spread, linear regression, normal probability distribution, conditional probability and probability rules.

## Trigonometry

Recommendation: Algebra II
.50 credit/1semester Grade 11-12


This one-semester course is designed for the student who wants to pursue a STEM career but wants an alternative to Honors Pre-Calculus. Topics will include a complete review of right triangle trigonometry, a thorough exploration of unit-circle trigonometry, and an in-depth study of the trigonometric identities. Students could take a pre-calculus class after completing this course, or could go into a college Calculus 1 course.

## Quantitative Reasoning

Recommendation: Algebra 1 plus one additional math course. 1 credit/full year
Grades 11-12


This course is designed to expose the student to a wide range of mathematics topics. Problem solving and critical thinking skills, along with the use of technology, will be emphasized and reinforced throughout the course as the student becomes actively involved in solving applied problems. Topics to be covered include Set Theory, Logic, Number Theory and Systems, Equations and Functions, Personal Finance, Geometry and Measurement, Probability and Statistics,

## Advanced Mathematical Foundations

Recommendation: Geometry
1 credit/full year
Grades 11-12

4ivis

This course is designed to ensure success in mathematics for students who plan to attend college. Topics covered are: operations with signed numbers; algebraic expressions; linear equations/inequalities; exponents; square roots; understanding and manipulating formulas; translating and solving word problems; interpreting and analyzing data; and graphing techniques. Emphasis will be placed on applying these skills in solving real work problems. This course can be a replacement for Algebra II.

## Business Mathematics <br> 1 credit/full year <br> Grades 9-12



This course teaches basic math skills for financial situations. Students will learn how to manage their money and their expenses while making financial and business decisions. Topics include calculating income; maintaining checking and savings accounts; understanding charge accounts, credit cards, and loans; vehicle costs; housing costs; insurance; and investments. This course will be of great value to both students who are interested in pursuing a college degree in business, and those who just want to gain a better understanding of how math will play a part of their everyday life.

## Mathematics of Construction

.50 credit/1 semester
Grades 9-12


This one-semester course will explore the math behind the new construction of a 3-bedroom home in Raymond. Steps involved: Find a suitable lot, and get estimates for clearing. Design a home using some software (3-D Architect, for example). How much excavation is needed to prepare for the foundation? Estimate the amount of concrete to pour the foundation. What is concrete anyway, and what proportions of materials go into that. Estimate the amount of lumber to frame the house, plus labor costs for all other aspects: doors and windows, roofing, wiring, plumbing, HVAC estimates. Sheetrock estimates. Lighting, electrical outlets, cabinets. Paving costs for driveway. Design and estimates for septic systems, and describe the science of a septic system. Selling costs, including realtor fees, and mortgages. What would the asking price be? What salary would a prospective buyer need to afford such a house? This course is designed for students who are seeking real world applications for mathematics or a career in construction.

# STEM DEPARTMENT Science 

RHS Graduation Requirements: Physical Science 1 Credit Biology 1 Credit, Elective Science 1 Credit State Graduation Requirements: Physical Science 1 credit, Biology 1 Credit

Science Pathways

| Physical Science | Honors Physical Science | Honors Biology |
| :--- | :--- | :--- |
| Biology | Honors Biology | Honors Chemistry |
| Chemistry or Science Elective | Honors Chemistry or Science <br> Elective | Honors Physics or Science <br> Elective |
| Physics or Science Elective | Honors Physics or Science <br> Elective | AP Biology, AP Chemistry, AP <br> Physics, Science Elective |

## Physical Science

1 credit/full year
Grade 9


This Course presents an application-oriented overview of the fields of physics, chemistry, and earth science. Basic skills involving measurement, graphing, the scientific method, metric measurements, and mathematical tools will be emphasized. The physics topics to be studied include motion, forces, energy, work, waves, sound, light, magnetism, and electricity. Chemistry topics will include the study of the properties and classification of matter, basic atomic structure, the periodic table and families of elements, bonding, and chemical reactions. Earth science topics to be covered will include astronomy and plate tectonics. Students will develop the skills of scientific problem solving and critical thinking. Laboratory experiments will stress safe laboratory practices, proper observation and reporting methods, and the application of concepts acquired through class activities. Current events will be discussed and connected to the curriculum.

## Honors Physical Science

Recommendation: Grade of $80 \% 2.5$ or higher in previous Science course
1 credit/full year
Grade 9

This course is fast paced and demanding. Students must demonstrate proficiency with skills involving measurement, graphing, the scientific method, metric measurements, and the application of mathematical formulas. Physics topics include the study of motion, forces, work, energy, waves, sound, light and color, and magnetism. The chemistry of matter describes how matter is structured, how atoms form molecules, and how molecules make up the matter in our physical environment. Chemistry topics will include the study of atomic structure, the periodic table, and the behavior of matter, chemical reactions and equations, acids and bases, and an overview of nuclear energy. Emphasis will be placed on research projects and laboratory activities.

This course will involve a detailed study of cell biology, biochemistry, DNA, and genetics. The history of life and evolution will be related to current systems of classification. The human nervous, endocrine, and immune systems will be studied and related to homeostasis. Ecology will focus on the interactions of organisms with their environments, the structure of ecosystems, photosynthesis and respiration, and biogeochemical cycles. Laboratory experiences are student centered and require the application of scientific principles acquired in class. Detailed laboratory reports are an essential part of the laboratories and will focus on scientific methods. A significant amount of memory work is involved due to a detailed study of biological vocabulary.

## Honors Biology

Recommendation: 80\% 2.5 or higher in previous Science course and teacher recommendation
1 credit/full year
Grades 9-10

This fast-paced and in depth biology course will involve a detailed study of cell biology, biochemistry, DNA, and genetics. The history of life and evolution will be related to current systems of classification. The human nervous, endocrine, and immune systems will be studied and related to homeostasis. Ecology will focus on the interactions of organisms with their environments, the structure of ecosystems, photosynthesis and respiration, and biogeochemical cycles. Laboratory experiences are student centered and require the application of scientific principles acquired in class. Detailed laboratory reports are an essential part of the laboratories and will focus on scientific methods. A significant amount of memory work is involved due to a detailed study of biological vocabulary. This course is intended to prepare students for Honors Chemistry, and is strongly recommended for students who are self-directed learners.

## Electives for Eligible Students

## Advanced Placement Biology

Recommendation: 80\% 2.5 or higher in previous Honors course and teacher recommendation
1 credit/full year


## Chemistry

Recommendation: Biology
1 credit/full year
Grades 11-12


This course will involve a detailed study of the structure, composition, and properties of matter, as well as the theories behind their conception. An appreciable amount of memory work is involved including formulas for word problem solving skills. A strong background in metrics, scientific notation and manipulation of formulas is essential. A solid foundation of Algebra manipulation is necessary. Students will demonstrate specific laboratory techniques requiring the application of principles acquired through lecture. Formal laboratory reports are required. A calculator is required for this course.

Honors Chemistry
Recommendation: $80 \% 2.5$ or higher in previous Science course and teacher recommendation 1 credit/full year
 Grades 10-12

This course will involve a detailed study of the structure, composition, and properties of matter, as well as the theories behind their conception. An appreciable amount of memory work is involved including formulas for word problem solving skills. A strong background in metrics, scientific notation and manipulation of formulas is essential. A solid foundation of Algebra manipulation is necessary. Students will demonstrate specific laboratory techniques requiring the application of principles acquired through lecture. Formal laboratory reports are required. A calculator is required for this course. Pacing and rigor will be more intense in Honors Chemistry.

## Advanced Placement Chemistry

Recommendation: $80 \% 2.5$ or higher in previous Honors Science course and teacher recommendation
1 credit/full year
Grades 11-12

Advanced Placement Chemistry is a course that focuses on the inquiry-based learning of essential concepts, and reasoning skills necessary to engage in science practices used throughout the study of A.P. Chemistry rather than factual recall. It is the equivalent of a first-year college general chemistry course. The course is designed to promote enduring conceptual understandings of the A.P. Chemistry content that supports these ideas. The course is taken with the expectation that students will take the A.P. exam to receive college credit or placement at the student's college of choice. Students can expect to spend a minimum of 25 percent of class time performing at least 16 hands-on lab investigations to support the learning objectives in the curriculum framework. Additionally, a minimum of six of the 16 lab investigations will include a guided inquiry-based component. The result will be readiness for the study of advanced topics in subsequent college courses. (Adapted from the College Board A.P. Chemistry Framework 2014.) NOTE: STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their guidance counselor.)

## Physics

Recommendation: 2 years of Science
1 credit/full year
Grades 11-12
(HAMPS/y,

The purpose of this course is to apply physics concepts to explain phenomena that students have observed in the everyday world. The primary emphasis is on comprehension rather than computation. Topics will include the study of various kinds of motion, forces, energy, sound, light, electricity, and magnetism. Students will be expected to use algebraic skills for some math computations. However, there will not be a heavy reliance on formula usage. Students will perform laboratory experiments that reinforce concepts. Developing the skills of collecting, organizing, and analyzing data will be emphasized. Students will be expected to demonstrate problem-solving strategies involving self-designed activities and demonstrations using common materials.

## Honors Physics

$8 \% 2.5$ or higher in previous Science course and teacher recommendation 1 credit/full year
Grades 11-12

This course will involve a detailed study of motion, forces, work, energy, momentum, sound, light, magnetism and electricity. A very strong background in metrics, scientific notation, significant digits and manipulation of formulas is essential. A solid foundation of Algebra manipulation is necessary. Formulas need to be memorized for tests. Laboratory experiences are student centered and require the application of principles acquired in class. Formal laboratory reports are required involving many precise calculations. This course is strongly recommended for students who are self-directed learners. A calculator is required.

## Advanced Placement Physics I

Recommendation: 80\% 2.5 or higher in previous Honors Science course and teacher recommendation 1 credit/full year
Grades 11-12

This fast-paced course covers mechanics, work, energy and power, waves including sound and light, and simple circuits. Students should have strong math, critical thinking, and reasoning skills and be concurrently enrolled in Honors Pre-Calculus or AP Calculus. Students should be independent learners and enjoy solving problems that combine a variety of physical concepts. Laboratory investigations will be a major part of the class and students will have to be able to design their own experiments and analyze and defend their results. NOTE: STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their guidance counselor.)

## Environmental Science

Environmental Science will focus on merging the sciences, and introducing a way of looking at science from a social science perspective. Topics will include the study of ecology, land and air based chemistry, natural resources, thermodynamics, and the local, national, and global effect humans have on earth. The course will be "deeply rooted" in analyzing scientific data related to the environment in order to learn how the world works, and to assess the impact humans have on Earth. Students will be expected to be active participants in discussions, and to practice and teach sound environmental choices to others in the community. Organizational skills, a cooperative team attitude, and a productive and independent learning style are a must. Fieldwork will be done to collect and analyze water and soil samples, identify flora and fauna, and participate in a variety of other activities. This course is strongly recommended for those students who are thinking of pursuing a postsecondary program of study leading to a career, which may be affected by environmental issues.


The purpose of this course is to provide a detailed study of the structure and function of all of the human body systems. Disorders and diseases associated with the systems will be emphasized. Scientific anatomical terminology will be applied to diagrams, models, and dissection specimens. The dissection of the fetal pig or cat will be used to reinforce the anatomy of the human body systems. The skills of scientific problem solving, critical thinking, laboratory observations, and reporting techniques will be emphasized. Students will be expected to apply lecture concepts to all laboratory work.

## Botany

Prerequisite: Recommendation:Biology .50 credit/1 semester Grades 10-12


The purpose of this course is to provide an overview of evolution, structure, and functions of all the major plant groups. Algae, fungi, mosses, ferns, and flowering and non-flowering plants will be identified with pictures, slides, and live specimens. The structure and function of roots, stems, and leaves will be studied and reproduction will be emphasized. Labs include plant identification, comparison, and drawing as well as fern fertilization and angiosperm dissection. The skills of scientific problem solving, critical thinking, laboratory observations, and reporting techniques will be emphasized. Students will be expected to apply lecture concepts to all laboratory work.


This course will provide an introduction to the classification, structure, and function of animals. Invertebrate studies will include an overview of the simplest invertebrates, worms, mollusks, arthropods, and echinoderms. Vertebrate studies will include a comprehensive examination of amphibians, reptiles, birds, and mammals. The skills of scientific problem solving, critical thinking, laboratory observations, and reporting techniques will be emphasized. Students will be expected to apply lecture concepts to all laboratory work. Field studies and dissections of representative animals will be conducted.

## Astronomy

Recommendation: Physical Science
.50 credit/1 semester
Grades 11-12

The purpose of this course is to gain an understanding about our solar system, our galaxy, and the universe. The history of astronomy will be introduced, the concepts of modern astronomy will be reviewed, and the methods astronomers use to learn about the universe will be studied. Laws of motion and gravity will be applied to the movement of celestial bodies. Online tools will be used and current events will be discussed. Students will be expected to work collaboratively and independently on labs, activities, and projects. A relevant field trip will be an integral part of the curriculum.

## Earth Science

Recommendation: Physical Science $.50 \mathrm{credit} / 1$ semester Grades 11-12


The purpose of this course is to study the world we live in. The emphasis will be on the topics of geology (the study of rocks, volcanoes, earthquakes, and plate tectonics); meteorology (climate, weather, and atmosphere); and oceanography (water systems and oceans). Our impact on the earth and its future will be highlighted. We will also cover natural disasters and related topics and the ways in which they affect the world around us. Students will be using laboratory kits, virtual labs, online resources, and a textbook. Students will be expected to work collaboratively and independently on labs, activities, and projects. A relevant field trip will be an integral part of the curriculum.

# Physical Education \& Health 

RHS Graduation Requirements: Physical Education 1 credit. Health .50 credit State Graduation Requirements: Physical Education 1 credit, Health . 50 credit

A student who participates in 2 sports in a school year can earn . 50 credit waiver towards their Physical Education Requirement. Students can earn up to a maximum of 1.00 credit waiver for Physical Education. Students must fill out P. E. Waiver Form in the School Counseling Office.

## Physical Education IA Semester 1

. 50 credit/1 semester
Grades 9-12


Physical Education IA Semester 1 will be offered in the fall. It is designed for students who are interested in team sports and individual sports. Units will include conditioning, flag football, ultimate Frisbee, basketball, health fitness, racket sports, and volleyball.

## Physical Education IA Semester 2

.50 credit/1 semester
Grade 9-12

Physical Education IA Semester 2 will be offered in the spring semester. It is designed for students who are interested in team and individual sports. Adventure Education will be the $1^{\text {st }}$ unit of the spring semester. Adventure Education emphasizes team building, problem solving, and confidence building. Highlights of this unit will include a low and high ropes course as well as a climbing wall. Other units will be softball, orienteering, floor hockey, and soccer.

## Physical Education IB Semester 1

.50 credit/1 semester
Grade 9-12

Physical Education 1B Semester 1 will be offered in the fall semester. It is designed as an introductory course for students who are looking to establish a healthier lifestyle. Units will include: golf, walking, bowling, flag football, recreational volleyball, basketball, health fitness, and yoga.

## Physical Education IB Semester 2

. 50 credit/1 semester
Grade 9-12

Physical Education IB Semester 2 will be offered in the spring semester. Adventure Education will be the $1^{\text {st }}$ unit of the spring semester. Adventure Education emphasizes team building, problem solving, and confidence building. Highlights of this unit include a low and high ropes course and a climbing wall. Other units will include softball, floor hockey, and soccer.

## Health

.50 credit/1 semester
Grade 10

Health education provides students with subject matter and learning activities necessary for the acquisition of knowledge, attitudes, appreciations, and behaviors essential to the growth, development, and wellbeing of each individual. Topics will include: nutrition, substance use and abuse, sexually transmitted diseases, fitness and current health topics.

## Physical Education II

Recommendation:: Physical Education I or 2 PE Waivers . 50 credit/1 semester Grades 10-12

Physical Education II is an elective course open to students who wish to participate in an advanced physical education course. Emphasis will be placed on lifetime activities, but team sports will also be covered. Activities will include: golf, ultimate Frisbee, flag football, health fitness, lacrosse, basketball, and racket sports.

## Physical Education III

Recommendation: Physical Education I or 2 PE Waivers .50 credit/1 semester
Grades 10-12

Physical Education III is an elective course open to students who wish to participate in an advanced physical education course. Emphasis will be placed on lifetime activities, but team sports will also be covered. Activities include: Adventure Education, volleyball, softball, team handball, and soccer.


# Integrated Computer Technology (ICT) 

RHS Graduation Requirements: 1 Credit State Graduation Requirements: . 50 Credits

Entering freshmen who have earned .50 credit in computers in middle school are required to earn .50 credit in computers at the High School level to meet the graduation requirements of 1.00 full credit. Effective with the Class of 2024, students will not receive high school credit for computer courses taken at IHGMS. ICT courses at the high school have been redesigned, so that upon entry students have greater flexibility for their first year computer courses, and for the first time pathways have been introduced to help students determine which courses may fit their individual needs best.
*Courses offered during school years beginning with an even number.
**Courses offered during school years beginning with an odd number.

## Digital Components \& Research I

.50 credit/1 semester
Grades 9-12


Digital Components \& Research I is a foundational course that allows students to explore how a computer functions through navigation of hardware and software introductions to chrome, Microsoft, and Google platforms. Students explore how a personal computer perpetuates communication, research and decision making through individualized career pathways, workplace needs, and household management. Topics include graphics, hardware, software, communication applications, data integration, cyber security topics. All topics are assessed through authentic performance assessment tasks that address department competencies and adhere to current industry standards.

## Computer Programming I*

. 50 credit/1 semester
Grades 9-12


Computer Programming I is a foundational S.T.E.M. course designed around "Top Down Design methodology to develop the logical thinking, syntax knowledge, and problem solving skills necessary to create both effective and efficient computer programs. Curriculum makes use of codeHS's "Introduction to Java (latte) course, free and accessible from most major devices. Topics include variable types, variables, operators, methods, conditionals, loops, arrays, and debugging. Readability, convention, style, and documentation-i of programs are assessed through authentic performance assessment tasks that address department competencies and adhere to current standards.

## Computer Aided Design (CAD) Integration** <br> $.50 \mathrm{credit} / 1$ semester <br> Grades 9-12



Computer Aided Design (CAD) Integration, a S.T.E.M. course, is designed to introduce students to CAD software, where 3 dimensional designs will be developed, refined, and 3D printed. All skills and basic knowledge are transferable to a variety of CAD and slicing platforms. Many geometrical and algebraic concepts are explored and applied in the context of "intentional design." Students will learn to
implement and streamline the design, development, and print processes for workflow through authentic performance assessment tasks that address department competencies and adhere to current standards.

## Game Development I**

. 50 credit/1 semester
Grades 9-12


Game Development, a S.T.E.M. course, is designed to introduce game design principles using code.org's Game Lab and portions of the Computer Science Discoveries Course curriculum, accessible from most major devices. Fundamental concepts include "Top Down Design," variables, randomization, sprites, loops, conditionals, user input, and complex movement. Many geometrical and algebraic concepts are explored and applied in the context of "intentional design." The game design process is also used when creating interactive scenes as students work towards creating their own games. Product development is assessed through authentic performance assessment tasks that address course competencies and adhere to current standards.

## Integrated Computer Technology

Grades 10-12
1 credit/full year


Code.org Computer Science Principles (CSP) curriculum is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. All topics are assessed through authentic performance assessment tasks that address department competencies and adhere to current industry standards.

This course was designed with the beginner in mind, so no prior experience in computers or programming is necessary to be successful in this course.

## Product Development

. 50 credit/1 semester
Grades 10-12


Product Development, a S.T.E.M. course, evaluates the concepts introduced in the level I S.T.E.M. courses. There will be student choice and flexibility within this course and opportunities to work in a team. Students options include but are not limited to: creating a new game or app using the code.org/codeHS.com environment, or learning a more advanced environment independently, learning a new programming language or becoming familiar with a new programming environment, development for the 3d printer, etc. The focus is on the development process, which includes, brainstorm, design, peer review, iterate, troubleshoot, debug, and finalize the product. All topics are assessed through authentic performance assessment tasks that address department competencies and adhere to current industry standards.

Project Lead The Way's Cybersecurity courses a full-year, rigorous, entry-level course that introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely. All topics are assessed through authentic performance assessment tasks that address department competencies and adhere to current industry standards.

## Introduction to Robotics*

.50 credit/1 semester
Grades 9-12


Introduction to Robotics, a S.T.E.M. course, is designed to allow an opportunity to merge code and machine. This course will construct a robot, integrate the computer components, and write code to issue commands for the robot. No prior experience is necessary. Daily opportunities are presented to develop creativity, problem solving, logical thinking, iterative process, and collaboration. Foundational concepts will include basic circuits, construction, and coding to issue robot commands. All topics are assessed through authentic performance assessment tasks that address department competencies and adhere to current industry standards.

Code.org Computer Science Principles (CSP) curriculum is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. Code.org is recognized by the College Board as an endorsed provider of curriculum for AP ${ }^{\circledR}$ Computer Science Principles (AP CSP). This endorsement affirms that all components of Code.org CSP's offerings are aligned to the AP Curriculum Framework standards and the AP CSP assessment.

This course was designed with the beginner in mind, so no prior experience in computers or programming is necessary to be successful in this course. It may also be taken as a non AP or AP course. NOTE: STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their guidance counselor.)

## Digital-Gomponents \& Research II

Recommendation: DigitalGomponents \& Researehor IGT Teacher Recommendation 50 eredit/4 semester
Grades 10-12

Bigital-Components \& Researeh II is designed to give-students a more indepth look at the advaneed features of platforms forms, introduced in Digital Components \& Research 1, that are designed to increase data based decision making, as this is a staple of today's workforee. New platforms with features driving efficiency in creating longer presentations for college, business meetings, of entrepreneurship opportunities are explored. Further in depth exploration of how data from spreadsheets \& graphics may be integrated into presentations to-support work is integrated. All-topics are assessed through authentic performance assessment tasks that address department competencies and adhere to current industry standards.

## NH-Jobs for America's Graduates

## NH-Jobs for America's Graduates

1 credit/full year
Grades 9-12


Jobs for America's Graduates (JAG), is a career driven course with a motivational leadership component taught in each and every class. Students learn to choose a career path and work in class to achieve that goal through team building, internships, job shadowing, resume writing, interviewing, and being part of the student run Career Association. Each student is responsible for mastering 37 competencies and completing at least 120 hours either in class, field trips, after school activities, or community service work to pass this course.


## Fine \& Performing Arts

RHS Graduation Requirements: . 50 credit
State Graduation Requirements: . 50 credit
Note: Participation in music courses may result in participating in activities during the school day which will cause students to miss class time in other subjects. The students are responsible for all work missed as a result of these related activities. All music courses meet the graduation requirements for Fine and Performing Arts.

## Art I

.50 credit/1 semester Grades 9-12

This course explores various forms of two and three dimensional art in a wide variety of art materials, processes, and styles. You will draw, paint, and create sculptural objects that are your own personal expression. This course is designed for students of all abilities and fulfills the basic art requirement. Come discover yourself and have fun doing so.

## Drawing I

.50 credit/1 semester
Grades 9-12

When you ask any high school student what art skills that they would like to improve on, most will say that they'd like to draw better. This course is designed to do just that. You will be taught to gesture, sketch, add interest and expression to your lines, draw accurate proportions, shade, and develop interesting compositions. There will be observational drawing as well as cartooning.

## Drawing II

Recommendation:: Drawing I and Art I
.50 credit/1 semester
Grades 9-12

Drawing II is for students that want to go beyond drawing basics and create drawings that are designed to impress. You'll experiment more with texture, pattern, and creating life like shading to jump your work from the page. Your work will have a finished quality that can only come with time and attention. You'll also have a chance to design your own project. Drawing II will immediately follow Drawing I in your schedule so that you can continue your growth as an artist.

## Painting I

Recommendation:: Art I or permission from instructor
. 50 credit/1 semester
Grades 9-12

Students taking painting will use a variety of painting media including acrylics, watercolor, and pastel. You will work on still life, portraits, and landscape painting. You will learn how to mix colors, create accurate values and color harmony, apply paint, and set up dynamic compositions.

## Painting II

Recommendation: Art I and Painting I
.50 credit/1 semester
Grades 9-12

Similar to Drawing II, this course offers students that want to get even better at painting an opportunity to continue growing as artists. It will be an opportunity to develop your expression beyond the basics, and you'll have a chance to develop a project that you would really like to do. In addition to the other painting media, you'll also be introduced to oil paint.

## Pottery

Recommendation: Art I
.50 credit/1 semester
Grades 9-12

Students will work on hand building techniques such as pinch, coil, slab, and draped forms, as well as throwing pots on the wheel. In addition, you will learn to decorate the surface of your piece by adding texture, pressing or carving texture, as well as glazing (painting) techniques. You will create functional pottery such as bowls and dishes, as well as sculptures out of clay. If you have had pottery before, and want to continue developing your skills, you can have advanced credit coursework in this time period. Please see the Art Teacher for details.

## Artisan Workshop

Recommendation: Art I
.50 credit/1 semester
Grades 9-12

As an artisan workshop student, you will be making handicrafts that are rooted in cultural traditions such as mask making, metal embossing, clay sculpture, silk painting, leatherwork, jewelry making, and tiles. You will learn about design, color harmony, and style as well as creating a lot of things you'll treasure for years to come.

## Open Studio

Recommendation:: Art I and one additional art course or bringing a portfolio of work to the instructor in order to get approval for admission to the course if you do not have the necessary coursework. $.50 \mathrm{credit} / 1$ semester
Grades 9-12

Students in this will have a choice of medium and subject matter that they wish to pursue. Along with the guidance of the instructor, the student will decide their subject matter as well as the mediums of choice to create their artwork. A plan of action will be developed with the teacher's help. Area of interest could include things like cartooning, calligraphy, animations, graffiti, abstract art, mixed media, anime, etc. Where do your interests lie? It's all about choice!

## Open Studio II

Recommendation: Open Studio I
$.50 \mathrm{credit} / 1$ semester
Grades 10-12

Open Studio Workshop II is a continuation of Open Studio Workshop I. Students are responsible for the design and implementation of their own curriculum. A pre-planning worksheet shared with the teacher is required for each of the six projects. Various media, subject matter and techniques can be explored.


## MUSIC <br> Concert Band

This is a program open to all students with a desire to learn/continue their education on a concert band instrument. Students must have their own instruments or have prior permission from the instructor to perform on a school owned instrument. Participation in the Marching Band is required.

Works suitable for symphonic performance are rehearsed, studied, and publicly performed. In addition to presenting formal concerts, the ensemble performs for school and community functions, and informal presentations. Students are especially encouraged to participate in various state and regional events, such as New Hampshire All-State Music Festival, Solo and Ensemble Festival, etc. Out-of-school time is required for rehearsals and/or performances.

Preparing music through practice at home and individual performance of passages (through electronic recording or in person) is required. Rehearsal and performance attendance is mandatory.

## Concert Band I

1 credit/full year
Grades 9-12

Freshmen with prior instrumental experience at the middle school level and/or freshmen through seniors with no prior instrumental experience.

## Concert Band II

Recommendation: Completion of Concert Band I or band director's recommendation.
1 credit/full year
Grades 10-12

## Concert Band III

Recommendation: Completion of Concert Band II or band director's recommendation.
1 credit/full year
Grades 11-12

## Concert Band IV

Recommendation: Completion of Concert Band III or band director's recommendation. 1 credit/full year
Grade 12

## Guitar I

.50 credit/1 semester
Grades 9-12

Guitar I is open to all students regardless of proficiency on the guitar. Although the class is designed primarily for beginners, advanced guitarists are welcome to take this course with the approval of the instructor. Students will learn to read music notation, chord playing, basic guitar theory, guitar tablature and various musical styles. These include blues, rock, jazz, classical and folk. Students are required to have their own guitar for this class. Preparing music through practice at home and individual/small group performance of pieces (through electronic recording or in person) is required.

## Guitar Ensemble

Recommendation: Successful completion of all Guitar I competencies; Student must provide their own acoustic/classical style guitar
.50 credit/1 semester
Grades 10-12
Guitar Ensemble encourages any student interested in continuing to improve his/her musical abilities to get involved in this ensemble experience for guitars only. The course continues to emphasize and develop music competencies associated with literacy fundamentals, basic music theory, and performance techniques acquired in Guitar I. Individuals will develop performance and instrumental skills as the ensemble studies quality guitar literature from multiple styles and genres. Participation in periodic public performances is required. This course can be repeated for an elective credit.

## Progressive Styles

Recommendation: Teacher permission $.50 \mathrm{credit} / \mathrm{semester}$ Grades 9-12

Progressive Styles is a contemporary music performance and production workshop. The purpose of this course is to give students a chance to compose, arrange, and perform music that is not usually studied in a traditional band or chorus setting. One of two main class goals will be to create or arrange several original or covered compositions, using any combination of rock and/or classical instruments, in a style that is in line with modern rock, blues, reggae, progressive, and/or alternative genres. Students will learn how to write lead sheets in order to preserve composition formats. The second class goal will be to perform this music in a live setting. Students who don't sing or play an instrument could work as sound engineers, light engineers, or in an entertainment production/marketing capacity once trained. This course can be repeated for an elective credit.

## Advanced Musicianship

Recommendation: Concert Band I \& II; or Raymond Singers I \& II; teacher recommendation .50 credit/1 semester Grades 11-12

Advanced Musicianship is designed for students that will be furthering their music education in a post secondary environment or those that are participating in the NH All-State audition process. It is designed to prepare students for either audition process and theory placement evaluations that are required as part of those two processes. Students will be required to prepare music from corresponding solo literature to add to their performance repertoire. Upon completion of prepared material, a jury of music educators will assess and provide feedback on the performance. Upon approved completion of the jury process, the student will then be required to publicly perform the material in a recital or concert setting. Credit will not be awarded until
completion of performance. Students will also be required to master the skills \& concepts necessary to successfully complete a college music theory placement exam. Heavy emphasis will be on ear-training and fundamentals of harmony. Offered 1st semester only. This course can be repeated for an elective credit.

## RHS Drumline

.50 credit/1 semester
Grades 9-12


RHS Drumline is open to all students regardless of musical proficiency. Students will learn to read marching percussion notation, basic marching percussion rudiments, techniques of ensemble playing, and various in the marching percussion genre. Special emphasis will be placed on music reading and basic musicianship. Students are required to have their own sticks and mallets for this class (can be purchased through the instructor). Preparing music through practice at home and individual/small group performance of pieces (through electronic recording or in person) is required.

## Topics in Contemporary Popular Music

.50 credit/1 semester
Grades 9-12
Topics in Contemporary Popular Music is a course designed to explore the issues and controversies associated with current popular music in America. Topics covered are but are not limited to: Lyrical content- appropriate or not and who decides?, Copyright infringement-is downloading without permission okay?, Who determines what consumers listen to- do you really have a choice?, America's Got The Voice Idol- Does the industry really care if you make it or not? This is a hands-on and project based class. Parental Notice- This course will explore the lyrical content of today's popular music and at times can be mature in nature. Please be advised that if your student enrolls in this course that you and your student are acknowledging and accepting the responsibilities associated with covering mature thematic material.

## Live Sound and Studio Recording

. 50 credit/1 semester
Grade level: 9-12

This is an introductory course in basic design and operation of live sound equipment and studio recording software and hardware. Students will demonstrate the fundamental skills to reinforce live music performances and the ability to produce and record performances both live and in a multi-track situation. Students will be exposed to and use all techniques and systems currently in use in the music industry. Want to record a song or create a podcast? This class is for you. Students should be computer literate and have a solid knowledge of basic math concepts. After school time will be required in order to fulfill course competencies.

## Raymond Singers

This is a program open to all students, however, voice placement auditions will be held. Choral works in the style of folk, classical, semi-classical, jazz, and pop are studied and performed. The course strives to cultivate the fundamental principles of singing through the study of tone production, resonance, breath control, diction, and voice care. Special emphasis will be placed on music reading and basic musicianship. Students are especially encouraged to participate in various state and regional events, such as New Hampshire All-State Music Festival, Solo and Ensemble Festival, etc. Out-of-school time is required for rehearsals and/or performances, including certain school holidays. Preparing music through practice at home and individual performance of passages (through electronic recording or in person) is required.

## Raymond Singers I

1 credit/full year
Grades 9-12

Freshmen with prior choral experience at the middle school level and/or freshmen through seniors with no prior choral experience.

## Raymond Singers II

Recommendation: Completion of Raymond Singers I or choir director's recommendation. 1 credit/full year
Grades 10-12

## Raymond Singers III

Recommendation: Completion of Raymond Singers II or choir director's recommendation. 1 credit/full year
Grades 11-12

## Raymond Singers IV

Recommendation: Completion of Raymond Singers III or choir director's recommendation. 1 credit/full year
Grade 12


## Business Education

## Accounting I - Introduction to Principles

.50 credit/1 semester Grades 9-12


This is an introductory course designed to teach students the basic concepts applied in financial record keeping. The emphasis is on precision and deductive reasoning as students learn skills such as how to record monthly business transactions and how to summarize and report financial information for a service business organized as a proprietorship. Students spend much of their time working cooperatively on accounting problems and they will gain experience that will help them to be successful in demanding college accounting courses, in office work, and in managing their own small businesses. These skills are necessary for any student planning to major in any business concentration in college.

## Accounting II - Corporate Accounting

Recommendation: Accounting I .50 credit/1 semester
Grades 9-12


This course is a continuation of the Accounting I course and is meant to increase competency in the keeping of books for the more complicated organizations of a merchandising business. Students will continue to explore the accounting cycle as it relates to a merchandising business organized as a corporation. The emphasis is on using special journals, subsidiary ledgers, payroll records, dividends, and taxes. This course will further prepare students choosing to enter a business major at the college level.

## Accounting III - Advanced Concepts

Recommendation: Accounting II
.50 credit/1 semester
Grades 10-12

This course is a continuation of Accounting II course with emphasis on advanced accounting topics such as uncollectible accounts, plant assets, depreciation, inventory, notes and interest, and accrued revenue and expenses. This course is extremely valuable for anyone thinking of entering into the field of accounting as a career choice.

## Accounting IV - Business Simulations

Recommendation: Accounting III
.50 credit/1 semester
Grades 10-12

This course is a continuation of Accounting I-III curriculum with emphasis on real world application of learned skills. Students will complete multiple business simulations related to sole-proprietorships, partnerships, and corporations in both the service and retail fields. This course is extremely valuable for anyone thinking of entering into the field of accounting as a career choice.

## Entrepreneurship

.50 credit/1 semester Grades 9-12


This course gives students a basic knowledge of business and takes them step-by-step through the entire process of planning and owning their own fictitious business. The creation of a business plan is covered extensively and students will then create a plan for a business of their choice. Real-world context, individual and group projects, math, communication, and history are used throughout the course to enhance the students' learning experience and give them valuable hands-on experience needed to manage a successful business.

## Personal Finance

. 50 credit/1 semester Grades 9-12


This course will help you learn how to plan and manage your personal finances, live a financially successful life, and take financial responsibility as a citizen. The personal focus of this course makes it relevant and meaningful to all; in particular, those just starting down the path to personal financial independence. Topics include the banking system, checking accounts, savings accounts, the use of credit, investing, insurance, budgeting, and money management.

## Sports and Entertainment Marketing

.50 credit/1 semester
Grades 9-12


In this course, students will explore the intriguing world of sports and entertainment from the perspective of marketing. Key marketing concepts and core standards of marketing are presented using real examples from sports and entertainment. This field is rapidly growing, and many colleges now offer specializations in this subject. Students will learn how and why a product, service, or idea gets from where it is produced or created to where it is consumed. Knowledge of marketing is indispensable to anyone who is planning a business career.

## Business Mathematics

1 credit/1 semester
Grades 9-12


This course teaches basic math skills for financial situations. Students will learn how to manage their money and their expenses while making financial and business decisions. Topics include calculating income; maintaining checking and savings accounts; understanding charge accounts, credit cards, and loans; vehicle costs; housing costs; insurance; and investments.

This course will be of great value to both students who are interested in pursuing a college degree in business, and those who just want to gain a better understanding of how math will play a part of their everyday life.

## Yearbook Publication

Fall Semester
.50 credit/1 semester
Grades 9-12


This is a unique course that gives high school students an on-the-job learning experience in producing a published book and in running a small business. Creating Raymond's yearbook, The Pynecone, takes a great deal of enthusiasm and dedication. Students will learn and practice all parts of publication production including: page layout and design, writing and revising copy, editing, proofing, taking photographs, cropping copy, advertising, and use of publication computer software. Students will also become aware of the responsibilities of running a small business including working within a budget, meeting deadlines, and being part of a team effort throughout the process.


## World Language

## French I

1 credit/full year
Grades 9-12

French I is an introductory course in which the primary objectives are the promotion of communicative abilities in the French language, including speaking, reading, writing, and comprehension (oral, written, reading). The student will learn to speak and understand basic everyday French. The student will be expected to write descriptive sentences in the language. The course will also help students to develop an appreciation for the French language and French-speaking cultures and their influences around the world. Students must be able to analyze critically, memorize, and study/learn independently in class in addition to outside of class.

```
French II
Recommendation:: French I and Teacher Recommendation
1 credit/full year
Grades 10-12
```

The primary objectives of French II are the continued promotion of communicative abilities in the French language, including speaking, reading, writing, and comprehension (oral, written, reading). Students taking this course will learn to understand and respond to more complex conversation, read longer paragraphs, and write French sentences on a grammatically and structurally more complex level. Students will also be expected to write short compositions and develop a deeper appreciation and understanding of the French language and French-speaking cultures. Students must be able to analyze critically, memorize, and study/learn independently in class in addition to outside of class.

## French III

Recommendation: French II and Teacher Recommendation 1 credit/full year
Grades 11-12

Student acquisition of balanced skills and increased fluency in French are the primary objective in French III. Situational activities provide opportunities for oral and written practice. The skills of understanding, speaking, reading and writing are emphasized with increased emphasis on complexity. Students are expected to read and discuss simple French literary works and write short compositions in the target language. A cultural component of this course will be the discussion and study of francophone countries and cultures and their relation to America.

French IV is designed to place an emphasis on advanced vocabulary and grammar and allow the student the opportunity to improve his/her ability to discuss, in French, various aspects of French and American culture. Students will study the history of France in addition to different authors and works from different time periods coordinated with increasing vocabulary and written practice. Students will be expected to discuss and use the language more actively.

## Spanish I

1 credit/full year
Grades 9-12


Spanish I is an introductory course designed to help the student understand, speak, read and write Spanish as it is used today throughout the Spanish-speaking world. This course is recommended for students with a high interest in learning the Spanish language and culture, and who have an adequate grasp of English grammar. Students must be able to analyze critically, memorize, and study/learn independently as well as in class.

## Spanish II

Recommendation: Spanish I and Teacher Recommendation 1 credit/full year
Grades 9-12

Spanish II builds on the grammar, vocabulary and syntax begun in the first year. Continuing development of writing, reading and communication skills are stressed, along with an expansion of cultural themes. Memorization skills and critical analysis are important for proficiency in Spanish.

## Spanish III

1 credit/full year
Grades 10-12


Spanish III begins with a thorough review of basic grammar and vocabulary studied the first two years. Situational activities provide opportunities for oral and written practice. In addition, students are encouraged to use the language more actively. The study of culture is an integral part of this course. Students will be learning about the geography, history, and culture of Spanish speaking countries.

## Spanish IV

Recommendation:: Spanish III and Teacher Recommendation 1 credit/full year
Grade 11-12


Spanish IV is designed to allow the student the opportunity to improve his/her ability to discuss, in Spanish, various aspects of the Spanish and American cultures. There will be continued and intensive study of Spanish authors, which will serve as the starting point for discussions, projects, and papers. Review of troublesome grammatical points will be coordinated with increasing vocabulary skills in order to communicate with the Spanish-speaking world.

Spanish V
Recommendation: Spanish IV and Teacher Recommendation 4 credit/full year
Grade 11-12


Spanish $V$ students will review concepts studied in Spanish 1-4 and focus on more advanced grammatical structures. Spanish $V$ students will continue their study of Spanish and Hispanic culture via various genres of literature, history, art, and film. Students will improve their writing skills by composing expository and creative passages on a regular basis. In addition, students will participate actively in elassroom diseussions to improve their aceuracy and fluencyinspeaking the target language.


## Family \& Consumer Sciences

## Foods and Nutrition

.50 credit/1 semester
Grades 9-12


Students will learn the principles of basic food preparation, nutrition, meal planning, table service and manners. They will learn about the global impact on food supplies and how food relates in our everyday lives. Through labs, projects and class work, students will practice preparation techniques and enhance cooking skills for a lifetime of fun and healthy eating.

## Health

.50 credit/1 semester
Grade 10


Health education provides students with subject matter and learning activities necessary for the acquisition of knowledge, attitudes, appreciations, and behaviors essential to the growth, development, and well-being of each individual. Topics will include: nutrition, substance use and abuse, sexually transmitted diseases, fitness and current health topics.

## Sociology (offered 2021-2022 school year)

.50 credit/1 semester
Grades 10-12

This course is an introduction to the study of human society. Students will learn about the impact of society and culture on individuals and about the role of individuals in the construction of social life and culture. The main topics to be covered include: culture, socialization, deviance, social stratification, race \& ethnic relations, gender \& age inequalities, and social institutions (family, religion, sport). A central focus of the course is understanding the nature of the individual in society.

## Psychology

.50 credit/1 semester Grades 11-12

This course is an introduction to the science of human behavior. Major emphasis will be placed on child development, learning and cognition, the mind, memory. Students must be willing to discuss mature topics and prepare independently for major discussions, debates and presentations. This course will give students the opportunity to gain insight into their own lives and behavior, while requiring advanced reading and critical thinking skills.

## Technical Education

## Woodworking I

.50 credit/1 semester Grades 9-12
$\sqrt{x}$

This introductory course provides an environment, instruction and activities that enable students to safely and effectively use woodworking tools, equipment and materials in fabricating wood projects. Students are taught to design, draw, and interpret project plans. They then construct a basic project while learning safety and procedures. The selection of their next project is based on their interests, aptitudes and abilities.

## Woodworking II

Recommendation:: Woodworking I
.50 credit/1 semester
Grades 9-12

This course is a continuation of Woodworking I with a shift from novelty softwood projects to hardwood cabinet and furniture making. Students will have the opportunity to develop craftsmen level skills as they construct drawers, doors, and sophisticated wood joints. They will also learn spindle and bowl turning on the lathe. This course also includes a unit in advanced finishing.

Fine Woodworking (offered 2021-2022 school year)
Course is also available as an ELO
.50 credit/1 semester
Grades 10-12

This course is an introduction to fine woodworking based on the instruction and application of basic woodworking skills. This is a thorough and intense class and is intended for the serious student only. The course includes in-depth instruction of all hand, power, and stationary tools and thorough instruction on the elements of design, shop drawings, and wood science. The course introduces the manipulation of materials, drawings, hand and power tool sharpening, joinery, assembly, and preparation for and finishing, to accomplish fine woodworking. The business side of woodworking is also discussed including the creation of a portfolio, customer relations, and wood shop set-up. This course is offered every other year.

This course is designed for students who have an interest in the construction trades, specifically residential construction. Students will learn basic architectural design and drafting, building materials, codes, and specifications, hand and power tool maintenance/operation, concrete mixing, framing, siding, roofing, drywall, basic plumbing and house wiring. The major projects in this class are post and beam construction, utility sheds and small structures. Infused into all aspects of this class is a comprehensive safety program.

## Introduction to Electricity and Electronics

Recommendation: Algebra I
.50 credit/1 semester
Grades 10-12

This introductory Electricity and Electronics course provides the student with a program of study necessary for developing basic electronic skills. Career opportunities in the field of electronics will be explored. The student will gain an understanding of AC/DC basic circuits, digital circuits, and basic electronic devices. The student will work with hand tools, meters, and soldering irons while building a variety of projects.

## Digital Photography

.50 credit/1 semester
Grades 10-12

This introductory course is designed to provide the student with an experiential class designed for practicing and developing basic photography skills as it applies to the quality of professional photography. The creative use of photography techniques as they relate to individual expression will be considered. Special projects and a final portfolio are required.

## Intro to Boat Building

.50 credit/1 semester
Grades 9-12
Prerequisite: Wood I


For those looking for an introduction to traditional wooden boat construction. Students will build a semi-dory skiff combining marine plywood, oak, and various species found locally. The course will start with understanding boat plans and lofting, and proceed through scarfing, framing, planking, and interior joinery work, while learning proper hand and power tool usage. In addition, students will explore the fundamentals of seamanship including sail theory, plotting, navigating, and knot work as well as building their own wooden model sailboats.

## Additional Learning Programs

## EXTENDED LEARNING OPPORTUNITY

Extended Learning Opportunities (ELOs) are available to all students at Raymond High School. ELOs promote student engagement, provide structure and authentic participation in real-world learning and career experiences. Extended learning opportunities can assist students with decision making regarding post-secondary plans. ELOs can take place during the school day, after school, on weekends or over the summer months.

What is a "good" ELO?
ELO's have four general components:

1. Research: meet competencies (points you must know to get credit), information can be in any form that provides evidence that you understood something new and can use it in a way new to you.
2. Reflection: keep a journal or blog during the ELO, use the journal to track what you have done and why.
3. Product: putting what you have learned into a form that demonstrates the information you have acquired such as portfolios, presentations, performances, rebuilt engines, job performance reviews from an employer/mentor, etc.
4. Presentation: actively communicate what you have accomplished to Individuals involved in your ELO. You will demonstrate your new knowledge and explain how your learning met the competencies.

The following programs can be used for student enrichment and/or recovery of credit:

## VLACS - Virtual Learning Academy Charter School

The Virtual Learning Academy Charter School is a Statewide, online high school that is available, free of charge, to all high school students who live in New Hampshire.

## Description:

The earned grade will be calculated into the student's GPA.

There are no restrictions based on grades to qualify for classes.

## Procedure:

VLACS will control the sign-up period.
Students are required to meet with their school counselor to obtain paperwork prior to signing up for a VLACS course

## ADULT EDUCATION

## Description:

The earned grade will be calculated into the student's GPA.

There are no restrictions based on grades to qualify for classes.

Students will be allowed to make up 3 required credits outside of Raymond High School while they are students at RHS.

## Procedure:

All rules and regulations of adult education programs will be recognized and followed by Raymond High School.

Guidance counselor and principal must approve the program and class to be taken.

# Seacoast School of Technology Course Descriptions 2020-2021 

## Please see the last page for Dual Enrollment opportunities available at SST!

## FIRST-YEAR PROGRAMS

> Pre-Engineering I is available for $9^{\text {th }}-12^{\text {th }}$ grade students that have completed Algebra 1 . All other first-year programs are available for $11^{\text {th }}-12^{\text {th }}$ grade students, as well as $10^{\text {th }}$ grade students on a space-available basis. Program-specific prerequisites do apply.

## Animal \& Plant Science I-NH Scholars STEM \& Lab Science

Do you love animals? Making things grow? Learn to expertly care for living things and prepare yourself for a career as a veterinarian, vet tech, barn/farm/greenhouse manager and many other careers working with animals and plants. You'll learn to care for and handle companion animals, recognize behavior, and begin on the road to veterinary care for both large and small animals. In addition, you will study aquariums allowing you to experience raising fish for fun or sale and aquaculture allowing you to gain hands-on experience raising food for consumption.
[Prerequisite - Biology]

## Automotive Technologies I-NH Scholars STEM

Calling all gearheads! Using Snap-on hand tools and the same computer diagnostic equipment found in well-equipped dealerships, learn bumper-to-bumper automotive systems and their repair. Hone your skills by working on customer and donated vehicles in a live shop that includes 13 bays, a parts room, 8 lifts, an in-ground alignment system and much more. Students have the opportunity to interview for internships at local dealerships or independent facilities. This program is certified through the National Automotive Technicians Education Foundation (NATEF).

## Biomedical Science \& Technology I - NH Scholars STEM \& Lab Science Dual Enrollment



Working in a state-of-the-art lab, you will be on the cutting edge of science studying molecular genetics and genetic engineering, cancer biology, microbiology, immunology, bioinformatics, DNA sequencing, environmental and marine science and more. You will gain techniques and knowledge that will prepare you to pursue careers in medicine, genetics, pathology, forensics, molecular biology and many other science-related fields.

## Building Construction Technologies I-NH Scholars STEM

Are you the type of person who takes pride in being able to create things with your own two
 hands? Learn basic skills in carpentry, hand and power tool safety, framing, remodeling, materials usage, green building and much more. You'll perfect your skills by working on a variety of real construction and renovation projects in our local community, and by the end of the year you will have the know-how to make a building weathertight.

## Careers in Education I - NH Scholars STEM \& Social Science - Dual Enrollment

 A program for those who want to work in a variety of educational roles ranging from pre-kindergarten, elementary, middle/high school, or even adult-ed teacher, to occupational/physical/speech \& language therapist, school counselor, child psychologist, special educator, social worker, administrator and more. This writing-intensive program is the first step toward a career in the field of education. In addition to student-teaching in the Wright Start Preschool, job shadows, and guest speakers from a variety of education-related professions, you will also study theories of development and learning, foundations of education, classroom management, lesson planning and best instructional practices.

## Introduction to Computer Science

Utilizing the Python programming language, you will learn what it takes to write your own computer programs. With an emphasis on computational thinking and problem solving, develop the skills to find novel methods of finding problem solutions. This course will form the foundation for all future study in the field of Computer Science. [Offered semester 1] [Prerequisite - Algebra I with a grade of " C " or better]

## C\#

This course will provide you with an understanding of structured, procedural and event-driven programming. Develop techniques for problem solving through the application of a variety of programming techniques and gain experience in program planning, design and coding as you complete lab work and assignments. Plan, design, code and test a variety of computer programs including games, simulations and productivity applications. You will learn to use the Visual C\# .NET programming language and integrated development environment. [Offered semester 2] [Prerequisite - Introduction to Computer Science]

## Culinary Arts I - NH Scholars STEM \& Art

If you're interested in learning the introductory skills for a career in the world of Culinary Arts
 and Restaurant Management, look no further! With daily hands-on activities and training, you'll soon be able to produce perfect knife cuts and cook restaurant quality meals from scratch. You will learn the importance of food basics, savory cooking and baking, knife skills, sanitation, nutrition and developing your palate while exploring regional cuisines. This course will also emphasize the appropriate standard of behavior and uniform that is set by culinary professionals.

## Digital Media Arts I - NH Scholars STEM \& Art - Dual Enrollment

(2 semester-based courses)

## Graphic Design

The art class of the new millennium... If you're an artist and you want to harness the power of creativity, then this course is for you. Backed with a strong influence from the fine arts, this course focuses on the concepts of good design and uses computer software such as Adobe Photoshop, Illustrator and InDesign to foster student creativity. [Offered semester 1]

## Animation

Breathe life into your artwork and make your creations come alive! Utilizing computer programs from Autodesk and Adobe, you will learn how to transform two-dimensional artwork into three-dimensional, digitally-animated models. [Offered semester 2]

## Health Science Technologies I - NH Scholars STEM \& Lab Science DualEnrollment

If you're thinking about any career in the health field, like becoming a doctor, nurse, physical therapist, dentist or even an EMT, then this course is for you. Learn about the human body and help people get and stay healthy. You will earn your First Aid certification while exploring human anatomy and physiology, medical terminology, safety, and legal and ethical issues within the health fields.
[Prerequisite - Biology]

## Marketing Technologies I - NH Scholars STEM \& Social Science - Dual Enrollment

Want to be your own boss? Marketing Technologies introduces the processes and strategies involved in transferring business products or services to a consumer. Through interactive discussions and projects, the course's main focus is on analyzing the marketing mix, it's interrelationships and how it is used in the marketing process. This course has a strong emphasis on business conduct, speaking and presentation skills. Some topics of study are: entrepreneurship, management, sports and entertainment marketing, fashion merchandising, e-commerce, hospitality and tourism and international studies. You'll develop your own business and learn how to market it, as well as operate the Upper Deck, SST's school store.

## Pre-Engineering I - NH Scholars STEM \& Lab Science - Dual Enrollment (2 semester-based courses) <br> Open to students grades 9-12

## SST Introduction to Engineering Design

Want to find out how to turn your innovative ideas into reality? Engineers are involved in everything that has ever been designed, built or manufactured. In this course, you will learn about the varied roles engineers play in our society, discover new career paths and possibilities, and develop engineering knowledge and skills, such as creating models and prototypes (physical and virtual). [Offered semester 1] [Prerequisite - Algebra I]

## SST Principles of Engineering

Make the leap from dreamer to doer! Engineers serve society by using engineering principles to develop solutions to technical problems and explore multiple manufacturing processes and technology systems. Come and participate in compelling, real-world challenges that will help you become a better collaborator and thinker. [Offered semester 2] [Prerequisite - Algebra I]

## SST Welding Technologies I - NH Scholars STEM If you're scared of melting metal, flying

 sparks, or holding torches in your hands that are hotter than the surface of the sun, then Welding Technologies is probably not for you. Still interested? You'll learn the basic techniques of STICK, MIG, TIG, plasma, brazing, soldering, blueprint reading and electricity. This program is ideal for students interested in the metal trades including welding and machining, as well as artists who want to work with metal.
# Seacoast School of Technology Course Descriptions 2020-2021 

## SECOND-YEAR PROGRAMS

## Animal \& Plant Science II - NH Scholars STEM \& Lab Science - Dual Enrollment



Continue to build on your experience, knowledge and hands-on skills. You'll spend several months at a local horse barn studying equine science, learn more about greenhouse management, sustainable food production, aquaponics and hydroponics, landscape and floral design, animal nutrition and reproduction, and complete a week-long internship in an area of personal interest. Participation and competition in FFA events is strongly encouraged. [Prerequisite - Animal \& Plant Science I]

## Automotive Technologies II - NH Scholars STEM - Dual Enrollment

Continue your automotive training by working in our live car repair and state inspection facility. Perform more complex repairs and tasks ranging from light mechanical, routine maintenance and parts ordering. You'll complete units on engine performance and diagnostics, suspension and steering, four-wheel alignment, earn your ASE Maintenance and Light Repair certification and position yourself for a career in the automotive industry. [Prerequisite - Automotive Technologies I]

## Biomedical Science \& Technology II - NH Scholars STEM \& Lab Science Dual Enrollment

This capstone course is an in-depth exploration of emerging technologies and innovations within the scientific community. You will explore current biotechnological applications in medicine, agriculture, forensics and the environment. Topics include gene modification, protein microarrays, directed mutagenesis, bioinformatics, DNA sequencing and more. You will also have the opportunity to participate in advanced internships during the school year and perform original research.
[Prerequisite - Biomedical Science E Technology I]

## Building Construction Technologies II - NH Scholars STEM

Continue to polish your technical building skills and examine topics such as energy efficiency, interior work and trim and blueprint reading. You'll put your knowledge to good use by building structures in the community such as homes, garages, sheds, additions and more. By the time you complete this program, you will be capable of doing all interior and exterior carpentry work on building projects large and small, and be ready to enter leadership programs for construction project managers.
[Prerequisite - Building Construction Technologies I]

## Careers in Education II - NH Scholars STEM \& Social Science - Dual Enrollment

 Continue to learn the craft of educating others. Coursework includes classroom management, curriculum development, differentiated instruction, best instructional practices and special education. Alongside advanced classroom instruction and teaching in the Wright Start Preschool, you will gain real-world experience in your preferred concentration area and create a professional teaching portfolio tailored to your specific goals. Internships are available for preschool, elementary, middle and high school, art/music/physical education, special education, physical/occupational/speech \& language therapy and early childhood education administration. This course is an excellent opportunity to continue exploring education-related professions and decide which career path to pursue in college.[Prerequisite - Careers in Education I]

# Computer Science II - NH Scholars STEM \& Lab Science - Dual Enrollment 

(2 semester-based courses)

## Java

The Java programming language is the major force behind the World Wide Web and can be found running on over 3 billion computational devices on the planet. The purpose of this course is to provide a solid foundation in the Java programming language, as well as further refine your knowledge of object-oriented design. Program planning, object-oriented design and Java language syntax will be emphasized. [Offered Semester 1]
[Prerequisite - Introduction to Computer Science]

## C++

C++ is the industrial heart of the computer software industry and is the primary development tool used to create major applications used by millions of people every day in business productivity, as well as video games. This course will introduce you to the fundamentals of structured programming, the procedural aspects of the C++ programming language, object-oriented design and implementation, as well as an introduction to basic data structures. You will create programs to demonstrate the topics of program control, functions, arrays, pointers, classes and objects. Visual C++ will be used as the primary development tool; however, other environments may also be utilized. Emphasis will be placed on the creation of platform-independent applications in order for you to become familiar with the core features of the C++ language. [Offered Semester 2] [Prerequisite - Introduction to Computer Science]

## Culinary Arts II - NH Scholars STEM \& Art - Dual Enrollment

Expand on your cooking and baking skills while exploring the cooking techniques and cultural aspects of global cuisines! You will learn advanced techniques, such as smoking, pickling and meat fabrication, in addition to the managerial side of a restaurant - from food cost to purchasing, ServSafe to menu writing and event planning to training. [Prerequisite - Culinary Arts I]

## Digital Media Arts II - NH Scholars STEM \& Art - Dual Enrollment <br> (2 semester-based courses)

## Web Design

Design your own web pages using the same techniques as professional graphic designers and web developers. Using Cascading Style Sheets (CSS) and the Adobe Design Premium Suite, you'll learn best practices in designing for the web and sharpen your skills by creating multiple web pages on topics of your choice. [Offered semester 1]

## Video Production

Learn how to operate all of the equipment in a cutting-edge video production studio that includes a green screen, high definition cameras, sound and lighting control room and much more. You will film, edit, and produce videos for both personal and commercial purposes using the editing software Premiere and After Effects. [Offered semester 2]

## Health Science Technologies II - NH Scholars STEM \& Lab Science Dual Enrollment

Dive deeper into the complexities of the human body by completing units on CPR and the cardiorespiratory, gastrointestinal, reproductive, endocrine and nervous systems. In addition to classroom and lab work on the SST campus, you will gain real-world experience through a ten-week internship at a local healthcare facility. Additionally, select students will have the opportunity to earn their Licensed Nursing Assistant (LNA) Certificate. [Prerequisite - Health Science Technologies I]

## Marketing Technologies II - NH Scholars STEM \& Social Science - Dual Enrollment

You'll complete an individualized curriculum that is tailored to your personal business interests and aspirations. Recent areas of specialization include business management, sports and entertainment management, hospitality, fashion, event planning, advertising, entrepreneurship, business law, international business and finance. You'll also work on real-life projects in the community, including planning and running the Small Business Showcase with the Exeter Area and Hampton Area Chamber of Commerce. [Prerequisite- Marketing Technologies I]

## Pre-Engineering II - NH Scholars STEM \& Lab Science - Dual Enrollment

(2 semester-based courses)

## Digital Electronics

Investigate how machines think and work! Using applied logic, you will learn about electronics and digital systems, explore engineering design, build circuits and develop electronics troubleshooting techniques. [Offered semester 1]
[Prerequisite - Either Introduction to Engineering Design or Principles of Engineering]

## Civil Engineering \& Architecture

Study the way that man-made structures such as buildings, dams, bridges and roads affect our environment and the way we live. Through a series of hands-on projects and guest speakers with expertise in a variety of topics, you will learn about the complex infrastructure that makes society work. [Offered semester 2]
[Prerequisite - Either Introduction to Engineering Design or Principles of Engineering]

## Welding Technologies II - NH Scholars STEM - Dual Enrollment

Enhance your welding skills by working with different alloys like aluminum and stainless steel, learning different techniques and welding positions, performing actual jobs of metal fabrication, manufacturing, repair and CNC Plasma. At the completion of this course, you will have earned your OSHA (Occupational Safety \& Health) training certificate and have enough skills and experience to take your certification tests in SMAW (STICK), GMAW (MIG) and GTAW (TIG) welding.
[Prerequisite - Welding Technologies I]


