Hopkinton High School

Program of Studies
2016-2017

Notice of Non-Discrimination

The Hopkinton School District does not discriminate in its education programs, activities, or employment practices on the basis of race, color, national origin, age, sex, sexual orientation, or handicap under the provisions of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1967, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973 and the Individual with Disabilities Education Act. Any person having inquiries concerning the Hopkinton School District's compliance with the regulations or the implementation of these laws may contact: Christopher Kelley, Principal.
Any person may also contact the Assistant Secretary for Civil Rights, U.S. Department of Education or the Director, U.S. Department of Education, Office for Civil Rights, Region I, Boston, Massachusetts.

CONTENTS

Hopkinton Middle High School
297 Park Avenue • Contoocook, NH 03229
Tel: 603.746.4167
Fax: 603.746.5109

Christopher M. Kelley, Principal
Rebecca Gagnon, Asst. Principal
www.hopkintonschools.org

Dear Students,

We are pleased to present the 2016-2017 Program of Studies. The Program of Studies is an important tool in assisting you and your parents in guiding your education. It is extremely important for you to examine the course offerings and make informed decisions.

Graduation requirements are outlined on pages seven and eight. Students are required to earn a total of twenty-four credits in order to graduate from Hopkinton High School. Please take the time to examine the graduation requirements.

Course selection is an important process. Course sections are offered as a direct result of the number of requests. For this reason, it is essential that your requests truly represent your interests. Please obtain as much information as possible before choosing a course. Speak with your parents or guardians, guidance counselor, teachers, and friends. Our goal is to create the best schedule possible for each and every student.

Please let us know if there is anything we can do to assist you in planning your 2016-2017 school year.

Best of luck,

Christopher Kelley
Principal

Rebecca Gagnon
Assistant Principal

Corrine Lajoie
Director of Guidance
Grades 8, 9-12 (L-Z)

Amanda Lonsdale
School Counselor
Grades 7, 9-12 (A-K)

Mission, Philosophy, and Purpose

Hopkinton School District Mission Statement

Above All, Care*

Three Tenets

Caring requires a thorough understanding of the one being cared for - know thy student

Caring requires actions that are motivated solely by the needs of the one being cared for - do what is right for kids

Caring requires the one being cared for to see the actions as caring - be mindful, artful, skillful

Hopkinton School Board Philosophy

We believe that an exceptional academic program must be the essential foundation of our schools. We believe all students should have equal access to the best instructional program designed to continuously challenge each student.

We believe our schools will thrive by focusing on intellectual growth in an environment of true respect for and excitement about learning. Through this focus, in partnership with family and community, students will be guided in growth of character, social responsibility, and emotional stability.

Our goal is to produce outstanding students who have developed the knowledge and skills needed to achieve their personal goals and to be responsible members of society.

Hopkinton Middle/High School Mission and Expectations

Please see back cover for Hopkinton Middle/High School's mission statement and a complete list of academic, social, and civic expectations.

Expectations for Student & Teacher Performance

Students will:

- Acquire a strong base of knowledge across the curriculum.
- Use critical thinking, analysis, and appropriate problem solving techniques.
- Communicate effectively in both oral and written expression, using insight, reason, and technical proficiency.
- Read, understand, and interpret information from a variety of sources, regardless of medium.
- Work both independently and collaboratively in order to complete tasks in a timely manner.
- Use technology to find, sort, and select data to create, revise, and present written and graphic documents, and to analyze and process numerical data.
- Develop positive personal attitudes and experience a variety of physical activities for lifelong wellness.
- Demonstrate awareness and sensitivity to those of other cultures and ethnic backgrounds.
- Demonstrate the creative process across the curriculum.
- Achieve at a high level across the curriculum.

Teachers will:

- Provide a curriculum which integrates content, theory, and practical application of acquired knowledge.
- Provide a challenging, intellectually demanding, and developmentally appropriate curriculum.
- Provide a wide range of co-curricular and extracurricular activities which complement the academic curriculum.
- Provide a safe, comfortable environment where people respect themselves, others, and their individual and cooperative achievements.
- Provide the support necessary for student success.
- Maintain effective communication between and among administration, staff, students, parents, and community.
- Use a variety of assessment methods.
- Provide meaningful opportunities for both independent and collaborative work.

Graduation Requirements of the Hopkinton School District

Subject Area	Required	Recommended
English	4 credits	4 credits
Mathematics*	3 credits	4 credits
Typically Algebra 1, Algebra 2, and one other math course within the sequence		
Science	3 credits	4 credits
Earth Systems Science, 1 credit		
Biology, 1 credit		
A physical science, 1 credit		
Social Studies	3 credits	4 credits
A global studies course, ½ credit		
American History, 1 credit		
Economics, ½ credit		
Civics, ½ credit		
A social studies elective, ½ credit		
World Languages**	2 credits	3 credits
Physical Education	1 credit	1 credit
Fine Arts (Art, Music, Lathe)	½ credit	1 credit
Information & Communication Technologies (ICT)***	½ -1 credit	1 credit
Health	½ credit	½ credit
Careers****	½ credit	½ credit
Practical Art (pg. 13)	½ credit	½ credit
Experiential Learning (pg. 13)	½ credit	½ credit
Electives	4 ½ credits	5 credits
Total	**24 credits**	**29 credits**

*** While Hopkinton High School still requires 3 credits in the content area of mathematics to graduate, the NH Department of Education has mandated that all students (starting with the Class of 2019) engage in courses carrying mathematics competencies for every year of high school attendance, even if graduation competencies for mathematics have been demonstrated. "This engagement may occur through the integration of one or more math competencies in courses focused on content areas other than mathematics" (NH Dept. of Ed. Technical Advisory).**

**** The World Language requirement must include the completion of the second level of the language. The first credit may come from the successful completion of Modern Language in grades 7 & 8.**

***** ICT: One credit if proficiency was not demonstrated by portfolio entering high school.**

****** Careers Graduation Requirement: Students will take Career Pathways as a 1/2 credit class and will complete two job shadows over the course of the semester. These job shadows fulfill 1/2 of the Experiential Learning graduation requirement.**

Credits

In order to earn credit in a course, a student must demonstrate proficiency in all of the competencies of the course.

Minimum credit requirements for promotion and graduation

For promotion to the sophomore class, a student must earn a minimum of 6 credits; to the junior class, 12; to the senior class, 18. (A minimum of 24 credits is required for graduation).

Credit/Competencies

Competency-based credit acquisition has been mandated by the New Hampshire Department of Education. Competencies are defined as content, skills, and understandings that are critically important to the student's current and future academic success. In order to earn credit, students must demonstrate proficiency in all competencies with a grade of 70 and earn a grade of 70 or better to pass the course. Students who do not achieve a grade of 70 will need to remediate the competency (e.g. Academic Advisory, before/after school, VLACS options, summer work) until a 70 is achieved or will need to repeat the course. Guidance preapproval is necessary to determine VLACS eligibility.

Elective courses

Electives are courses students may choose to take in addition to their required courses. We recommend that students choose electives according to personal preference, with an eye towards exploring career possibilities and rounding out their education.

Not all semester courses are offered in every semester. Elective offerings can be found in the following departments: Art, Business, Computer Science, Family & Consumer Education, English, Mathematics, Modern Languages, Music, Science, Social Studies, Technical Education, School to Career, and the Concord Regional Technology Center.

Hopkinton High School operates on Day 1/Day 2 Block Schedule. Classes meet for 75 minutes every other day, with a few exceptions. A one-credit course runs for the entire year; a half-credit course runs for a semester.

Recommended Programs, Grades 9 and 10

The following tables are designed to assist students in planning a four-year program that ensures they meet graduation requirements. A course marked with this symbol (❧) is a required course. The recommended program for each grade designates a path through the curriculum at Hopkinton High School. It allows students a full range of options as they plan their post-secondary education and careers.

As certain electives are not offered to ninth and tenth grade students, fulfillment of Fine Arts, Physical Education, Health, and Computer Science requirements in grades 9 and 10 allows students greater freedom to choose among elective offerings in grades 11 and 12.

Grade 9 (minimum 6 credits)

English 9	1 credit
Algebra 1 *or* Algebra 2	1 credit
Integrated Science 9: Earth Systems 2	1 credit
World Cultures	1/2 credit
Early American History	1/2 credit
French, German, *or* Spanish 1 *or* 2	1 credit
Physical Education (1 semester)	½ credit
Foundations of Tech. (ICT intro. course) **1**	½ credit
Health **2**	½ credit
Fine Arts **3**	½ credit
Elective(s)	

Grade 10 (minimum 6 credits)

American Studies	2 credits, or
American Literature	1 credit and
American History	1 credit
Algebra 2 *or* next in sequence	1 credit
Biology	1 credit
French, German *or* Spanish 2 *or* 3	1 credit
Physical Education (1 semester)	½ credit
ICT (additional course) **5**	½ credit
Fine Arts **3**	½ credit
Elective(s)	

Students typically schedule at least 1 study hall each semester; i.e., one every other day in the block schedule, or one study hall each day. (See notes on next page.)

Notes:

1 Foundations of Technology must be taken if proficiency was not demonstrated through an ICT Portfolio entering high school.

2 1/2 credit in Health must be taken in either grade 9 or grade 10.

3 1/2 credit in Art, Music, or Lathe may be taken at any time, grades 9-12.

4 1/2 credit in Career Pathways should be taken in grade 11 which will satisfy half of the Experiential Learning requirement in grade 11 or 12.

5 1/2 credit additional course in Info. & Comm. Tech. may be taken at any time after the introductory requirements are met either through a Foundations of Tech class or demonstration of ICT Proficiency through a portfolio.

Recommended Programs, Grades 11 and 12

Grade 11 (minimum 6 credits)

Composition 11 ❧	½ credit
English elective ❧	½ credit
Mathematics ❧	1 credit
A Physical Science	1 credit
Economics ❧	½ credit
Social Studies elective	½ credit
French, German, *or* Spanish	1 credit
Career Pathways [1] ❧	½ credit
Experiential learning requirement ❧	½ credit
Practical learning requirement ❧	½ credit
Elective(s)	

Grade 12 (minimum 5 credits)

English electives ❧	1 credit
Mathematics	1 credit
Science	1 credit
Civics ❧	½ credit
Social Studies elective	½ credit
French, German, *or* Spanish	1 credit
Experiential learning requirement ❧	¼ credit
Practical learning requirement ❧	½ credit
Elective(s)	

Students typically schedule at least 1 study hall each semester; i.e., one every other day in the block schedule. (See rationale on next page.)

Notes:

[1] **The job shadow portion of Career Pathways satisfies half of the experiential learning requirement.**

Academic Load

- All students in grades 9-11 **must** carry a minimum of **six courses** in their schedules at all times. Most students in these grades carry seven courses and one study hall in each semester. Peer Instructing will not be counted in this total. Students in grades 9-11 must take six courses to qualify for the honor roll.

- All students in grade 12 **must** carry a minimum of **five courses** in their schedules at all times, though most carry more. We recommend that students in this grade carry seven courses. Peer Instructing may not be counted in this total. Seniors must take five courses to qualify for the honor roll. (See special qualifications, re: NEC, NHTI and VLACS, pg. 61 & 63)
- Most students should have at least one study hall in addition to academic advisory time. This is for the purpose of make-up work, study time, guidance/college planning time, competency remediation and use of the library or computer lab.
- Students will be allowed to make adjustments to their schedules during a designated drop/add period at the beginning of each semester. After this, they must obtain permission and fill out a Drop/Add form (available from Guidance).
- A student may not drop a course after the designated drop/add period. Under exceptional circumstances, a student may appeal to the administration for permission to drop a course. This will be allowed only when the student is carrying more courses than required. Established procedures will be followed. Should the student be allowed to drop a course, the student's transcript will reflect that decision in two ways: a grade of "WP" (Withdrawn Passing) or "WF" (Withdrawn Failing) and no credit.

Scheduling difficulties

Due to the limitations inherent in scheduling our small school, conflicts may arise in students' schedules. For example, if a student were to select two courses, both single-section courses and both meeting at the same time, the student would have to choose between the two. Similarly, if fewer than twelve students request a particular elective, that course would likely be canceled. These examples suggest that the wise student will fulfill his or her graduation requirements as early as possible.

Further, if a section is run, the Principal reserves the right not to allow a student to drop if the number drops below 12 and no extenuating circumstances require the drop. Please consider carefully when making choices. Students may select one or more honors courses. In order to meet their requests and to avoid tracking students, the scheduler will make every effort to schedule honors and standard sections of a course concurrently, whenever possible.

Honors Sections

Honors sections of English, social studies, and science courses are offered in some course(s). These courses are indicated in the descriptions. A student's academic performance, teacher

input, and the following criteria will be utilized for admission into honors courses:

- Students must achieve an average of 90% or above in the prerequisite course(s) to be considered. This benchmark has been a strong predictor of readiness for honors level work. (Science requirements may vary slightly.)
- Students must apply to the appropriate department chairperson or faculty member for admission into the honors section of a course. The application process may include any or all of the following requirements: interview, writing sample, project, or portfolio as determined by the instructor.

Honors sections establish and maintain high academic standards, requiring more work of students. Students have the opportunity to be in an honors section in one, two, or three disciplines based on aptitude, interest, and commitment; they need not be "tracked" into a full slate of honors courses. Contracts for honors-level work are available in many standard college-preparatory courses as well.

Project Lead the Way Courses

Project Lead The Way (PLTW) is a national program forming partnerships among public schools, higher education institutions and the private sector to increase the quantity and quality of engineers and engineering technologists graduating from our educational system.

PLTW has developed a four-year sequence of courses which, when combined with college preparatory mathematics and science courses in high school, introduces students to the scope, rigor, and discipline of engineering and engineering technology prior to entering college. The courses are as follows:

- Introduction to Engineering Design
- Principles of Engineering
- Computer Integrated Manufacturing
- Civil Engineering and Architecture (not offered in 2016-2017)
- Engineering Design and Development
- Computer Science and Engineering (CSE)
- Aeronautical Engineering
- Digital Electronics

College credit from the Rochester Institute of Technology or New Hampshire Technical Institute can be awarded for a nominal fee for each of the PLTW courses. (Certain requirements apply)

Project Running Start Courses

The New Hampshire Running Start Program allows high school students to enroll in college courses offered by the Community Technical College System at significantly reduced tuition ($150 per 3 credits for GIS, all others 4 credits). (The price is subject to change without notice. Financial aid is available to students in need taking Project Running Start courses.) These college courses will be offered during the day at HHS and some will be offered for both high school and college credit. Each is taught using the same course curriculum that is used at the college. The courses offered for Running Start credit are as follows:

- Project Lead the Way courses (IED, POE, CIM)
- AP Physics Mechanics (= NHTI Physics I) (4 cr. per semester)
- Precalculus
- AP Chemistry (4 cr. per semester)
- GIS & Natural Resource Management
- College Accounting
- Ecology
- Biology 2 (4 cr. per semester)
- Some CRTC Programs

Advanced Placement (AP) Courses

For students in grades 11 and 12, the following Advanced Placement courses are offered: AP English, AP World History, AP Psychology, AP Calculus AB, AP Calculus BC, AP Statistics, AP U.S. History*, AP Physics Mechanics, AP Physics Electromagnetics and AP Chemistry. Students may contract for an "AP Option" in select courses in which they follow the AP curriculum in addition to the regular course curriculum. It is strongly recommended that students take no more than three (3) AP courses in a single year. *AP US History may be open to qualified sophomores upon teacher approval.

Experiential/Practical Credit

- Experiential Learning Credit: This credit is defined as hands-on learning that involves, at least in part, real life experiences. Credit for this category of learning requires some connection outside of the classroom. All students are required to complete two job shadows, as part of the 1/2 credit Career Pathways class. The following may fulfill the remainder of this credit: CRTC, Internships,Yearbook, Engineering Design and Development, Adventure Ed, GIS and Natural Resource Management and service learning projects, among others. (1/2 credit in this category is required for graduation.)
- Practical Arts Credit: This credit would be achieved by the application of learned content, knowledge, and skills to every day living situations. Examples include wood technology, family and consumer science, business education and some Proj-

ect Lead the Way courses. (1/2 credit in this category is required for graduation)

Requirement Key to Program of Studies

E = fulfills experiential learning requirement

F = fulfills fine art requirement

ICT = fulfills information & communication technology requirement

P = fulfills practical learning requirement

Course Descriptions

The course descriptions begin on the next page. Departments are organized alphabetically. Please note the following conventions:

- Required courses are designated with the symbol (❧).
- **Grade levels**: The appropriate grades at which students may elect to take a course are listed with each course description. In some cases (Algebra 1, for example), students must meet certain academic criteria in order to take the course at the lower grade level.

Contoocook Academy, ca 1856

BUSINESS

P Business Mathematics 1cr 10, 11, 12

A1, A2 , A3, S1, C2

This course is designed to teach the skills needed to make informed consumer and business decisions. Topics may include financial planning, earning and reporting income, saving and investing, using credit, managing finances and budgeting, inventory management, and sales forecasting. Students will learn to apply math concepts as a valuable tool for business and personal use. Students will apply basic mathematical and algebraic operations to solve problems involving whole numbers, decimals, fractions, percentages, ratios, and proportions. Mathematical procedures will be used to analyze and solve business problems and interpret data using common statistical procedures.

P College Accounting 1 1 cr 10, 11, 12

A1, A2 , A3, S1, C3

In this course, students study the complete accounting cycle for a service and a merchandising business. This involves the principles and methods of recording business transactions, involving both cash and credit sales and purchases, and preparing and interpreting financial statements. This course should prepare the student for an initial job in a bookkeeping department, for keeping records in a professional office, and for performing the separate bookkeeping functions in a large accounting office. This is an activity-oriented course with completion of actual jobs almost daily. Simulations are presented for realistic development of a skill.

Students who intend to major in Accounting, Computer Science, Business Administration, or Hotel Management in college are encouraged to take this course.

This course is part of the Project Running Start Program. Students may earn three college credits through the New Hampshire Technical Institute for a $150 fee.

P Marketing, Advertising, and Media Awareness 1cr 10, 11, 12

A1, A2, A3, S1, C2

Marketing, Advertising, and Media Awareness is a broad-based survey course designed to help students understand the field of marketing and its career possibilities. This course presents such topics as marketing functions, problem-solving, decision-making, marketing research, ethics in marketing, new product development, price determination, and marketing channels. It will also introduce aspects of advertising such as how advertising is created and

the media in which it appears. Students will develop skills in analyzing and producing media, and understand how media influence our tastes, behavior, and purchasing decisions.

P Small Business Management and Entrepreneurship 1 cr 10, 11, 12

A1, A2, A3, S1, C2, C3

The purpose of this course is to introduce the student to what business is, how it operates, and how it is managed. Subjects such as business in its environment, business organization, production and marketing, finance, business communications systems, employer-employee relations, and management functions will be covered to provide the students with an understanding of the wide variety of aspects involved in business ownership. Hands-on projects are used whenever possible to make the subject more realistic and understandable.
Students who intend to major in Accounting, Computer Science, Business Administration, or Hotel Management, in college are encouraged to take this course.

P College Accounting 2 1 cr 11, 12

A1, A2 , A3, S1, C3 ***Prerequisite: Accounting 1***

This course is a continuation of the fundamentals of accounting concepts and procedures, including the following topics: depreciation, payroll accounting, accounting for partnerships and corporations, long-term investments, and financial statement analysis.

Students who intend to major in Accounting, Computer Science, Business Administration, or Hotel Management in college are encouraged to take this course.

COMPUTER SCIENCE/COMPUTER TECHNOLOGY

ICT ❧ Foundations of Technology 1/2 cr — Required: 9*

A1, A2, A3, S1, C1, C2, C3

Through this half-year course, students will demonstrate mastery of ISTE•S, (International Society for Technology in Education • Students) literacy skills. Projects included within the curriculum will address computer operations and concepts, research and information fluency, and communication and collaboration using web 2.0 tools. Students will demonstrate creative thinking while constructing original works, forecasting trends, and solving technical problems. Students will describe the human, cultural, and societal issues related to technology and practice legal and ethical behavior. *Required for students who do not demonstrate ICT competencies through an ICT Portfolio by the end of grade 8.

ICT, P Exploring Computer Science 1/2 cr — 9, 10, 11, 12

A1, A2, A3, S1, C1, C2, C3

An introduction to computer science – no experience necessary! This course is designed to introduce students to foundational concepts in computer science. Students will learn the impact of computing in society, human computer interaction, and the application of computing across career paths. Lessons will be designed to promote inquiry-based learning, foster creativity and collaboration, and problem-solving methods associated with computational thinking. Students will create interactive stories or art, simple apps for mobile devices, and analyze data. Students will then transfer the understanding of programming in visual based languages to learn introductory elements of text-based programming. **This course meets the ICT "additional course" requirement.**

ICT, P, E Like Social Media Marketing 1/2 cr — 9, 10, 11, 12

A1, A2, A3, S1, C1, C2, C3

This course provides a practical and detailed introduction to Web 2.0 tools and social media, as well as exposure to a student-run technology help desk for the school. Students will be guided in the creation of personalized learning networks, to sup-

port ongoing learning and collaboration. The course will emphasize components of digital citizenship including issues related to creative credit and copyright, digital footprints, security, and information literacy. As part of the help desk, students will be required to assess and solve problems for their classmates and teachers. After successful completion of the course, students may apply to become help desk staff members.
This course meets the ICT "additional course" requirement.

ICT Desktop Publishing (DTP) 1/2 cr 10, 11, 12

Primary: A1, A3, S1 ***Prerequisite: Foundations of Technology or ICT Portfolio***

This half-year course will teach students the basics of graphic design, using Adobe InDesign software on the computer. They will learn about fonts, styles, page design, page layout, and electronic publishing. Real-world projects, including business cards, stationery, and brochures will be stressed. In the process, students will become masters of InDesign—a very useful skill. Students interested in working on the yearbook should take DTP first.
This course meets the ICT "additional course" requirement.

ICT, E Yearbook 1 cr 11, 12

A1, A2, A3, S1, S3, C2 ***Prereqs.: DTP or permission of instructor, plus application form***

The students in this class are responsible for the production and publication of the Hoptonian, the Hopkinton High School Yearbook. Students will be responsible for all aspects of yearbook publication including sales, advertising, design, photography and writing. They will also study the legal and ethical issues inherent in yearbook publication. Students choosing this course need to be aware that preparing the publication can be time-consuming and challenging.
This course meets the ICT "additional course" requirement.

ENGLISH

Students will take required English courses in grades 9 and 10. During their junior year, students are required to take Composition 11; additionally, as juniors and seniors, students must choose at least one more writing-based and two literature-based elective courses to complete graduation requirements in English. Students must pass both English 9 and American Studies or American Literature to enroll in Composition 11. Second-semester sophomores who have teacher-approval may enroll in available junior-senior electives (during the add/drop period for semester 2). Honors contracts may be available in non-honors courses. The successful completion of an honors contract will generate an asterisk beside the course name on a student's transcript.

❧ English 9 — 1 cr — Required: 9

A1, A2, A3, A4, S1, S2, C2

One major focus of English 9 is writing. Students will concentrate on writing the paragraph, as it is the primary unit of composition. They will learn how to construct paragraphs in essays and as academic responses, both for English and other courses. A second major focus is reading. Students will be required to select books that they will read independently outside of class, covering a variety of genres and topics. They will respond to their independent reading through journal writing. In class, students will be assigned literature from four genres: short story, poetry, novel, and drama. Through analysis of a variety of fiction and non-fiction, students will improve their reading comprehension and critical, analytic skills. Grammar, usage, and vocabulary are studied throughout the year. **Honors section available**

❧ American Literature — 1 cr — Required: 10

A1, A2, A3, S1, C2 — ***Prerequisite: English 9***

American Literature is a year-long course in which students trace the American literary tradition, from 1815 to 2001. Through novels, plays, non-fiction, poetry, and short stories, students will read to understand how American history has influenced the literature written, will develop analytical reading and writing skills, and will study themes in depth. Students will demonstrate their thinking and understanding through paragraph writing, multi-paragraph essays and key passage assignments. Emphasis will also be placed on grammar instruction and research skills. **Honors section available**

Honors American Studies — *2 cr (Eng & Hist)* — *Required: 10*

Primary: A1, A2, A3, S1, C2 — ***Prerequisite: English 9***

American Studies is an honors-level course, co-taught by an English and a history teacher. During the year, students will study the period from 1815 to 2001, learning about American history and the American literary tradition. They will also explore everyday life in the past, making connections among art, music, literature and non-fiction. Students will develop research, writing, and analytical reading skills. *This course satisfies the 1-credit NH state graduation requirement in US History.*

❧ *Composition 11* — *1/2 cr* — *Required: 11*

A1, A2, A3, S1, C2 — ***Prerequisite: American Studies-Literature/American Studies***

In Composition 11, students will further improve and refine their skills as writers. The student's goal as a writer will be to reach and hold an audience. Students will tell stories, write descriptions, explain processes and persuade others to believe their opinions. In other words, students will practice writing in the four modes of discourse: narration, description, exposition, and persuasion. Students will also write a research paper. They will improve their proofreading and editing skills through revisions of drafts. Upon completion of this course, students will be prepared to handle the variety of writing tasks in other English elective courses. Composition 11 is a graduation requirement.

ENGLISH ELECTIVE COURSE OFFERINGS

(Elective offerings are available to second-semester sophomores with teacher approval)

Literature-based electives will run every other year. In 2016-17, World Literature, Shakespeare and Myth and Folklore will be offered. In 2017-18, The Short Story, Science Fiction and Women's Literature will be offered.

Writing-Based Electives	**Literature-Based Electives**
AP Literature & Composition *(Full-year class; counts as both a writing and literature-based elective.)*	
Journalism	World Literature
Creative Writing	Science Fiction (not be offered in 2016-2017)
Creative Non-Fiction -(not offered 2016-2017)	Women's Literature
Public Speaking	Shakespeare
Technical Writing -(not offered in 2016-2017)	The Short Story (not offered in 2016-2017)
	Myth and Folklore

AP Literature & Composition 1 cr *11*

A1, A2, A3, S1, S2, C2

AP Literature is a college level course. Students will focus on close, critical readings of poetry, drama, fiction, and expository prose from the sixteenth century to the present. Their critical discussion and writing about these works will revolve around the authors' techniques, themes, styles, and tones. Students are encouraged to take, though not required to take, the AP Exam. AP Literature is not structured solely as preparation for the AP Exam. AP English fulfills both a writing and a reading requirement.

WRITING-BASED ELECTIVES

Creative Writing *1/2 cr* *11, 12*

A1, A2, A3, S1, S2, C2

Creative Writing is a workshop course that introduces students to the basics of reading and writing in various modes: poetry, short fiction, and drama. As writers in this course, students will experiment and practice their craft, taking their cues from various published poets, writers, and dramatists in order to understand the strategies writers use to strengthen and clarify their ideas. Students will also begin to develop a sense of their own personal style of writing by responding to prompts and assignments. They will work through the stages of the writing process and share their work with their classmates.

Technical Writing *1/2 cr (not offered in 2016-2017)* *11, 12*

A1, A2, A3, S1, S2, C2

Technical writing is the act of communicating "on the job," including the communication needed for and in the fields of business, science, and technology. Students will learn the writing, speaking, and listening skills needed in these fields.

The content of the communication in technical writing often requires a different style, format, and vocabulary than that with which students are more familiar. In a sense, technical writing is a language of its own. We know it (in part) because we already know English; however, students probably don't know what makes the English they know technical. In a sense, students will be introduced to a "new" language through the course. Students will use the computer as a tool connecting them to other technologies. Students will be encouraged to discover and bring to class examples of the kinds of communication that are required of workers. Perhaps an answer to "What is technical writing?" lies in another question: What kinds of communication skills are necessary to get and hold a desirable job in the twenty-first century?

Creative Non-Fiction *1/2 cr (not offered in 2016-2017)* *11, 12*

A1, A3, S1, C1

Creative Non-Fiction introduces students to successful models of writing in a wide range of genres, including nature writing, technical writing, travel writing, food writing, sports writing, the profile, the memoir, and the personal essay. After introductions to these genres, students will write their own pieces that reflect their knowledge of each mode of writing. While the literary elements of character, setting, tone, etc. are different in non-fiction, students will continue to apply knowledge of such literary elements in these new genres. Students will begin to develop a sense of their own personal style of writing and will work through the stages of the writing process in order to create polished final drafts.

Journalism *1/2 cr* *11, 12*

A1, A2, A4, S, C1, C2

Students in this course will take on various roles in the field of journalism: reporter, columnist, and editor, for example. They will write for and publish regularly in the Talon, the student newspaper. To be able to take on the various roles related to journalism, students will study how news is gathered, written, edited, published, or otherwise disseminated in newspapers, magazines, or radio and television broadcasts.

Students will develop not only skills related to the field of journalism, but they will also develop media literacy. Through their course work and through their work on the Talon specifically, students will use skills necessary for electronic publication. The requirements of the course will ask, from time-to-time, that students attend, as reporters, school or community events outside of the regular school day.

Public Speaking *1/2 cr* *11,12*

A1, A2, A3, S1, S2, C2

Public Speaking is both a writing and performance-oriented course designed to introduce students to the elements of voice production, group communication, public speaking, and debate. It is expected that students with college expectations, ambitious career goals, and those entering the job market directly after high school will enjoy the various types of speech communication activities practiced, as well as benefit from the development of structured writing and oral communication skills.

LITERATURE-BASED ELECTIVES

Shakespeare *1/2 cr* *11, 12*

A1, A2, A3, S1, C2

This course will make Shakespeare's plays enjoyable and exciting for students. From bloody duels to comical flirtations, from heated political arguments to impassioned soliloquies, the plays will come alive. Students will study Shakespeare himself and the times in which he lived, but their understanding of the language in and action of the plays themselves will be students' primary focus for this course. In addition to the sonnets, students will read four of Shakespeare's plays. Although this is a literature-based class, writing is a major component of it.

Women's Literature *1/2 cr (not offered in 2016-2017)* *11, 12*

A1, A2, A4, S1, S2, C2

This class will focus on the various ways women are presented and perceived in literature; additionally, students will explore how historical and social changes have affected these presentations and perceptions of women. Students will achieve both of these goals by carefully reading poetry, drama, and prose written primarily by female writers. At the completion of this course, students will be able to recognize common treatments of women in literature and see how women, through both classic and modern works of literature, challenge these roles. Although this is a literature-based course, writing is a major component.

World Literature *1/2 cr* *11, 12*

A1, A2, A3, S1, S2, C1, C2

World Literature examines the human conflicts found in literature worldwide, from Russia to India, from Africa to South America. In World Literature, students will examine a variety of cultures at different points in history. By immersing themselves in these cultures through literature, students find not only what is unique to each culture, but also what is universal among cultures. Students will also be able to identify what elements make for a good story, no matter from where or from whom the story springs. Although this is a literature-based course, writing is a major component.

Science Fiction *1/2 cr (not offered in 2016-2017)* *11, 12*

A1, A2, A4, S, C1

The literature of the imagination has become a field in its own right. In this course, students will discover the roots of science fiction, trace the development of science fiction, and learn

the techniques of science fiction writers. Students will engage primarily in analytical reading of science fiction novels and short stories. Through their reading, students will create a working definition of science fiction. Although this is a literature-based course, writing is a major component.

The Short Story *1/2 cr* *(not offered in 2016-2017)* *11, 12*

A1, A2, A3, S1, C2

This literature elective will focus on the genre of the short story. The course will explore this genre from three perspectives. First, students will examine the development of the short story as the natural descendent of the fairy tale, the fable, and the folk tale. They will look at the characteristics of these early, primarily oral ancestors of the story and determine how these became what we now think of as the short story. Second, students will explore a series of sub-categories within the short story genre—horror, mystery, historical fiction, war stories, and science fiction—to demonstrate the flexibility of the form. Third, students will select one author from a list of possibilities, read a series of short stories by that author, and compare the elements of the story from one author's point of view. Although this is a literature-based course, writing is a major component.

Myth and Folklore *1/2 cr* *11, 12*

A1, A2, A3, S1, S2

Students in this course will learn the purposes and effects of mythology and folklore. Students will compare and contrast the myths and folktales of various eras and cultures, including Greek and Roman, Norse, Aztec, and Native American, to determine how and why societies use such stories. Students will also explore the lasting impact of mythology and folklore, investigating how cultures today react to and or reflect the lessons of these stories. Students will select an independent text and explore how that piece uses mythic or folkloric elements. Writing is a major component of this literature based course.

FAMILY & CONSUMER SCIENCES

P Foods 1: Food Rules! 1/2 cr 9, 10, 11, 12

A1, A3, S1, S2, S3, C1

This kitchen lab course covers the fundamentals of food preparation and service, with emphasis on a safe working environment and sanitary conditions in all areas of the facility. Students will receive instruction in equipment, identifying tools, and vocabulary terms used in recipes. The importance of nutrition, meal planning, and following procedures in recipe directions will be stressed. Students will prepare a variety of foods.

P Foods 2: Culinary Arts 1/2 cr 10, 11, 12

A1, A3, S1, S2, S3, C1 **Prerequisite: Food Rules!**

This kitchen lab course provides advanced instruction and experience in the preparation of grains, vegetables, and main dishes. Students will fabricate a chicken and create classic and nuovo cuisine, incorporating knife skills and various cooking techniques. Culminating activities include a catering event and a cultural exchange of foods from around the world.

P On My Own 1/2 cr 11, 12

A1, A3, S1, S2, S3, C1 **For enrollment in grade 10: Permission of instructor**

Ever wonder what it will be like when you're finally on your own? On My Own simulates what the world has in store for you as you make those important decisions and establish those defining goals: what I really want to be when I grow up; the decision to leave home; scoping out affordable first-time housing, suitable wheels, daily meals; how to be a savvy consumer with sharp financial skills in a culture where everyone wants a piece of your paycheck. This course allows you to get a head start, while emphasizing the purposeful use of goals, critical thinking, and communication skills. Fast-paced and never dull, this course will help prepare students to be more knowledgeable consumers.

FINE ARTS: ART, MUSIC, & THEATRE

ART

F Drawing and Painting 1 — 1/2 cr — 9, 10, 11, 12

A1, A2, A3, S1, S2, S3, C1, C2, C3

The purpose of this course is to enable students to develop basic perceptual, observational, and compositional skills necessary to communicate a range of subject matter, symbols, ideas, and concepts. Students will use knowledge of drawing and painting media, processes, and techniques. Course topics will include media techniques and processes, elements of art and principles of design, art history and critical thinking and analysis.

F Drawing and Painting 2 — 1/2 cr — 9, 10, 11, 12

A1, A2, A3, S1, S2, S3, C1, C2, C3 Prerequisite: Drawing and Painting 1 or permission of instructor

This course continues the exploration of visual perception and techniques, contemporary art and art history, and technical/expressive possibilities introduced in Drawing and Painting 1.

F Ceramics — 1/2 cr — 9, 10, 11, 12

A1, A2, A3, S1, S2, S3, C1, C2, C3

The ceramics course explores functional, decorative, and expressive forms in clay. Students will be exposed to a variety of hand-building, wheel-throwing and clay finishing techniques, and examine historical and contemporary practices in clay.

F 2-D Design — 1/2 cr — 9, 10, 11,12

A1, A2, A3, S1, S2, S3, C1, C2, C3

In this course students will solve various problems of visual and practical design. This includes computer and hand-drawn graphics in a variety of media, using the elements and principles of design, graphic color theory, and references to professional work.

F 3-D Design — 1/2 cr — 9, 10, 11,12

A1, A2, A3, S1, S2, S3, C1, C2, C3

This course explores artistic, expressive and structural issues of three-dimensional form.

Representational, abstract and commercial subject matter will be interpreted. Students will explore a variety of techniques, including carving, assemblage, and casting.

F, ICT Introduction to Digital Media 1/2 cr 9, 10, 11, 12

A1, A2, A3, S1, S2, S3, C1, C2, C3 Prerequisite: ICT Portfolio or permission of instructor

This course focuses on the history, aesthetics, and technology of digital still photography and videography. Students will shoot and edit still photographs, and will work independently and collaboratively on a variety of short video projects that will allow them to participate in all aspects of video pre-production, production, and post-production. Students may use their own Mac-compatible equipment. This course may also be taken to fulfill the additional ICT course requirement.

F Photography 1/2 cr 9, 10, 11, 12

A1, A2, A3, S1, S2, S3, C1, C2, C3

This film-based photography course stresses the importance of using composition, focus, and contrast when taking a photograph. The adjustment of the raw print will be achieved through burning, dodging, and spotting processes. Each student must supply his or her own 35-mm film camera and a stock of poly-contrast paper.

F Advanced Art 1/2 cr 9, 10, 11, 12

A1, A2, A3, S1, S2, S3, C1, C2, C3 Prerequisite: Drawing and Painting 1or permission of instructor

Advanced Art enables students to develop a personal expressive style in the disciplines of drawing, painting, printmaking, sculpture, design and crafts. This course is strongly encouraged for those students who intend to continue studies in visual art. The first quarter consists of teacher directed assignments; the second quarter is made up of student/teacher directed assignments.

MUSIC

F High School Chorus 1/2 cr 9, 10, 11, 12

A1, A2, S3, C1

This course is open to students in grades 9-12 who enjoy performing quality choral literature. Emphasis will be on solfeggio, choral styles, diction, and multicultural music. Improvisation, as well as solo and accompanist opportunities, will exist. The chorus will participate in at

least three performances plus the National Honor Society induction and HHS graduation.

F Concert Band *1/2 cr* *9, 10, 11, 12*

A1, A2, S3, C1

This course is open to students who play a band instrument in grades 9-12. Emphasis will be on tone production, ensemble playing, technique and overall musicianship. At least three public performances are required, with many more as optional.

F Jazz Band *1/2 cr* *9, 10, 11, 12*

A1, A2, S3, C1

Prerequisite: Permission of instructor

This course is designed to develop improvisation skills, while concentrating on standard jazz literature. It is a requirement that students take Concert Band concurrently, unless by permission of the instructor. Performances are required.

F Steel Band *1/2 cr* *10, 11, 12*

A1, A2, S3, C1

This course is open to students who have an interest in improving their musical knowledge through the study of pan. On the occasion that too many students sign up, seniority will come into play. Emphasis will be on ensemble performance and mastery of the typical and most used elements of pan music. There are required performances and many that are optional.

F Music Theory *1/2 cr* *10, 11, 12*

A1, A2, A3, A4

This course will teach basic composition and design of two, three and four part music. Note reading, rhythm reading and basic music set up will be reviewed. By the end of this course, students will be able to write melodies and harmonies appropriate for vocal and instrumental ensembles, including the sounds of today. Some of these compositions may be performed.

F Guitar *1/2 cr* *9,10, 11, 12*

A1, A2, A3, A4

No matter your ability on guitar this three tier class will fulfill your skill level. Guitar 1 is basic guitar starting with reading notes and beginning chords in various genres of music.

Guitar 2 explores reading notes in groups and further exploration of chords as well as building a repertoire of songs. Guitar 3 is a self-driven course that is accompanied by a private instructor outside of school. Guitars are not provided (special circumstances may allow some who do not have guitars to borrow from the school).

THEATRE ARTS

F Theatre Arts *1/2 cr* *9, 10, 11, 12*

This course is a study of the general principals of theatre arts, including the methods, aims, functions and characteristics of this unique art form, with an overview of its history and its impact on society. The class will focus on the practical applications employed by this art form and will allow for individual expression.

F Intro to Technical Theatre *1/2 cr* *9, 10, 11, 12*

This course is designed to develop those skills employed with the "backstage" elements of a theatrical production. The class will include an overview of the following crafts associated with theatre arts: lighting, sound, set construction, properties, stage rigging, costumes, make-up and stage management.

F Acting I *1/2 cr* *9, 10, 11, 12*

In this course students will learn the basics of acting. Through games and exercises, students will learn how to use their voice and body for the stage. Students will learn techniques for character development and how to read a script as an actor. Short scenes will be performed in class.

F Directing *1/2 cr* *9, 10, 11, 12*

Prerequisite: Acting I

In this course students will learn about leadership and work to find their own style as an artistic director. Through studying how others have been successful, students will create techniques that work. Students will learn about production concepts as well as how to work with actors. Directing students will work closely with the acting class and direct students in short scenes, putting their theories into practice.

MATHEMATICS

The mathematics curriculum for Hopkinton Middle High School offers great flexibility to all students. Students may tailor their courses of study based on their skills, interests, or future goals. There is no single path to success. Students should involve their parents, guidance counselors, and mathematics teacher to determine what offerings best meet their needs. Students must meet any prerequisites and should have their mathematics teacher's recommendation for any course they elect to enroll in.

❧ Algebra 1 — 1 cr — Required: 8*, 9

A2, A3, S1, C2 — **Prerequisite: Pre-Algebra or equivalent**

This course is the foundation for all high school mathematics courses. Skills taught in this class will lay the groundwork for upper level math and science courses. It is a bridge from the concrete to the abstract study of mathematics. The focus of Algebra 1 is the study of expressions, equations and functions. Among the topics discused: polynomials; radical expressions; linear functions and relations; solving systems of equations; rational functions and equations, factoring and quadratic functions; exponential functions; and an introduction to statistics and probability. Real life applications are presented within the course content. ***Certain academic criteria must be met in order to take this course in grade 8. A minimum of a 90 in 7th grade Pre-Algebra and current mathematics teacher recommendation is required.**

❧ Algebra 1A — 1 cr — 9

A2, A3, S1, C2 — **Prerequisite: Pre-Algebra or equivalent**

Algebra 1A is the first half of a two-year version of Algebra 1. This class is designed for students who struggle with mathematics. It features lots and lots of practice and review. The content of this course is equivalent to the first half of a two year version of Algebra 1. (Entry requires recommendation/approval from math faculty member.)

❧ Algebra 1B — 1 cr — 10

A2, A3, S1, C2 — **Prerequisite: Algebra 1A or equivalent**

Algebra 1B is the second half of a two-year version of Algebra 1. See Algebra 1A above. (Entry requires recommendation/approval from math faculty member)

Algebra 2 — *1 cr* — *Required: 9, 10*

A2, A3, S1, C2 — ***Prerequisite: Successful completion of Algebra 1***

Algebra 2 is a course that extends the content of Algebra 1 and provides further development of the concept of a function. Topics include: (1) relations, functions, equations and inequalities; (2) conic sections; (3) polynomials; (4) algebraic fractions; (5) logarithmic and exponential functions. The content of this course is important for students' success on both the ACT and college mathematics entrance exams. Throughout this course, students will develop learning strategies, critical thinking skills, and problem solving techniques to prepare for future math courses.

❧ *Algebra 2A* — *1 cr* — *Required: 10, 11*

A2, A3, S1, C2 — ***Prerequisite: Successful completion of Algebra 1B or 1 with math teacher recommendation***

Algebra 2A is the first half of a two-year version of Algebra 2. This class is designed for students who struggle with mathematics and would benefit from extra time and extra practice in learning the material. The content of this course is approximately the first half of Algebra 2. After an extensive review of Algebra 1 skills, the course will focus on the following broad topics: solving equations, working with linear functions, working with systems of linear equations, and working with quadratic functions. In addition to algebra skills, graphing and the use of a graphing calculator will be featured.

❧ *Algebra 2B* — *1 cr* — *Required: 11, 12*

A2, A3, S1, C2 — ***Prerequisite: Successful completion of Algebra 2A and math teacher recommendation***

This course is the follow-up to Algebra 2A and uses the same mix of a slower pace and intensive practice. The content is approximately the second half of Algebra 2 and includes polynomial functions, inverse functions, radical expressions, exponential functions, and rational (fractional) functions. Time permitting, conic sections and trigonometry will be introduced.

Geometry — *1/2 cr* — *10, 11, 12*

A2, A3, S1, C2 — ***Prerequisite: Algebra 1***

Through this semester course, students will gain an understanding of two and three-dimensional objects and their properties. Properties and relationships of geometric objects include: (1) points, lines, angles and planes; (2) polygons, with a special focus on quadrilaterals, triangles, right triangles; (3) circles; and (4) polyhedra and other solids. If time permits, an

understanding of proof and logic is developed. Use of graphing calculators and computer drawing programs is encouraged where possible.

Advanced Algebra *1 cr*
10, 11, 12

A2, A3, S1, C2 ***Prerequisite: Integrated Mathematics 2 or Algebra 2***

This course focuses on developing mastery in algebraic skills while enhancing and expanding knowledge in algebra, functions, and trigonometry. It is expected that students from this course may go on to Pre-calculus and/or Statistics. Therefore, this course will provide a rigorous approach to the topics covered and their applications, and substantial homework will be required.

Pre-calculus *1 cr* *10, 11, 12*

A2, A3, S1, C2 ***Prerequisite: Advanced Algebra or Honors Alg 2, or Alg 2 with an 85 or better average and/or current math teacher recommendation***

This course emphasizes high school algebra from a calculus perspective. Students will initially be introduced to all functions from a calculus perspective. The following functions will be reviewed and expanded upon: power, polynomial, rational, exponential, logarithmic, and trigonometric. Sequences and Series, as well as related topics, may be discussed if time permits. **This course is part of the Project Running Start Program. Students may earn four college credits through the New Hampshire Technical Institute for a $150 fee.**

Introduction to Statistics *1/2 cr* *10, 11,12*

A2, A3, S1, C2 ***Prerequisite: Algebra1***

This course will introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to three broad concepts: planning a study, exploring data and statistical inference. It is assumed that students entering will already have a strong grasp of algebraic functions and their accompanying graphs.

Statistics *1 cr* *10, 11,12*

A2, A3, S1, C2 ***Prerequisite: Algebra 1***

This course is intended for students who do not have the prerequisites or the desire to take calculus. It is assumed that students entering will already have a strong grasp of algebraic functions and their accompanying graphs. This course will introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to three broad conceptual themes: exploring data, planning a study and statistical inference. Much of the course will use real-world examples for activities and projects.

AP Statistics *1 cr* *11,12*

A2, A3, S1, C2 ***Prerequisites: Pre-calculus, Algebra 2 or Advanced Algebra and current mathematics teacher recommendation***

This course prepares students to take the Advanced Placement examination as it is the equivalent of a college-level statistics course. It is intended for students who have a thorough knowledge of college preparatory mathematics, including algebra, geometry, trigonometry, and analytic geometry (graphs and graphing). Students entering should have a strong grasp of algebraic functions and their accompanying graphs. This 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: exploring data, planning a study, statistical inference and anticipating patterns. It is encouraged that students take the AP exam upon completion of this course.

AP Calculus AB *1 cr* *11, 12*

A2, A3, S1, C2 ***Prerequisite: Pre-calculus AND current mathematics teacher recommendation***

This course prepares students to take the Advanced Placement examination in the equivalent of a college-level first-semester calculus course. It is intended for students who have a thorough knowledge of college preparatory mathematics, including algebra, geometry, trigonometry, and analytic geometry (graphs and graphing). The AB course focuses on the three basics of calculus: limits, derivatives, and integrals. We will look at the derivatives and integrals of functions represented in three ways: a formula, a graph, and a table of values.

AP Calculus BC *1 cr* *12*

A2, A3, S1, C2 ***Prerequisite: Calculus AB AND current mathematics teacher recommendation***

This course prepares students to take the Advanced Placement examination in the equivalent of a college-level second-semester calculus course. It is intended for students who have successfully completed Calculus AB. In addition to a review of topics from AB, the BC course tackles techniques of integration, differential equations, Taylor and Maclaurin series, and more.

WORLD LANGUAGES

For continuation to the subsequent level in any world language class, students should have a C average or better and/or the permission of the instructor. Students must also have met the competencies of the previous level. Incoming students new to the Hopkinton School District will be placed appropriately based on prior student language experience and an evaluation by the instructor. **Students must successfully complete level 2 of a world language in order to graduate from Hopkinton High School.**

German 1 is not available in the high school and must be started in middle school.

French 1 *1 cr* *9, 10, 11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3

French 1 is an introduction to the language that emphasizes listening and speaking skills and understanding basic grammar concepts. Students learn the vocabulary and grammar necessary for simple spoken and written communication. The language is placed in its cultural context through the study of songs, holiday customs and geography. A field trip to Quebec City may be offered to students at this level.

French 2 *1 cr* *9, 10, 11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: French 1***

French 2 continues to emphasize proficiency-based listening, speaking, reading and writing skills in the context of simple communication. In addition to the text and practice materials, authentic cultural materials such as excerpts from native language newspapers, television and video, and multiple internet resources are used in this communicative program. Students will be able to understand basic conversations and respond to simple questions concerning travel, weather, buying and selling, directions, descriptions, life styles and leisure activities.

French 3 *1 cr* *10, 11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: French 2***

French 3 is proficiency-based and continues to deepen and add knowledge of the complex structures necessary to interact with some success in a native environment. The students will review and expand skills in grammar, speaking, reading, writing and listening comprehension by sustaining short information-based conversations effectively and appropriately in culturally based situations. The classes are conducted in French. Students at this level are eligible to participate in the French exchange program if it is offered.

French 4 *1 cr* *11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: French 3***

French 4 offers a total experience in French language immersion. Students continue to develop the four language skills of listening comprehension, speaking, reading and writing in contexts which have more sophisticated grammatical structure. In addition to the culturally authentic media such as video, multiple internet resources and radio broadcasts and native newspapers, students will read a complete literary work in French and explore French literary analysis. The classes are conducted in French. A French immersion experience may be offered at this level. The French 4 curriculum is an approved AP curriculum. Students at this level are eligible to participate in the French exchange program if it is offered. Students in French 4 may opt for AP credit and may sit for the AP exam.

French 5 *1 cr* *12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: French 4***

French 5 continues to immerse students in a French language experience. Students are required to participate in daily discussions, prepare essays on a variety of topics, present oral reports on selected topics and read a variety of texts, from literature to contemporary magazines and newspapers. Listening skills are sharpened through the use of authentic video, films and multiple internet resources. The classes are conducted in French. Students at this level are eligible to participate in the French exchange program if it is offered. The French 5 curriculum is an approved AP curriculum. Students in French 5 may opt for AP credit and may sit for the AP exam.

German 2 *1 cr* *9, 10, 11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: German 1***

German 2 continues to emphasize proficiency-based listening, speaking, reading and writing skills in the context of simple communication. In addition to the text and practice materials, genuine cultural materials such as excerpts from native language newspapers, television and video are used in this communicative program. Students will be able to understand basic conversations and respond to simple questions concerning travel, weather, buying and selling, directions, descriptions, life styles and leisure activities.

German 3 *1 cr* *10, 11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: German 2***

German 3 is proficiency-based and continues to deepen and add knowledge of the complex structures necessary to interact with some success in a native environment. The students will

review and expand skills in grammar, speaking, reading, writing and listening comprehension by sustaining short information-based conversations effectively and appropriately in culturally based situations. The classes are conducted in German. Students in level 3 are eligible to participate in the German exchange program if it is offered.

German 4 ***1 cr*** ***Prerequisite: German 3***
German 5 ***1 cr*** ***11, 12***
A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: German 4***

German 4/5 is a combined course with a curriculum that repeats every two years.
German 4/5 offers students a total experience in German language immersion. Students continue to develop the four language skills of listening comprehension, speaking, reading and writing with the emphasis on more sophisticated grammatical structure. Students are required to participate in daily discussions, present oral reports, prepare essays on a variety of topics and explore readings from various sources. Culturally authentic materials will be utilized. Students in level 4/5 are eligible to participate in the German exchange program if it is offered.

Spanish 1 ***1 cr (will not be offered in 2016-2017) 9, 10, 11***
A1, A2, A3, S1, S2, S3, C1, C2, C3

Spanish 1 is an introduction to the language which emphasizes listening and speaking skills and understanding basic grammar concepts. Students learn the vocabulary and grammar necessary for simple spoken and written communication. The language is placed in its cultural context through the study of songs, holiday customs, and geography.

Spanish 2 ***1 cr*** ***9, 10, 11, 12***
A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: Spanish 1***

Spanish 2 continues to emphasize proficiency-based listening, speaking, reading and writing skills in the context of simple communication. In addition to the text and practice materials, culturally authentic materials are used in this communicative program. Students will be able to understand basic conversations and respond to simple questions concerning travel, weather, buying and selling, directions, descriptions, life styles and leisure activities. A Spanish immersion experience may be offered at this level.

Spanish 3 ***1 cr*** ***10, 11, 12***

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: Spanish 2***

Spanish 3 is proficiency-based and continues to deepen and add knowledge of the complex structures necessary to interact with some success in a native environment. The students will review and expand skills in grammar, speaking, reading, writing and listening comprehension by sustaining short information-based conversations effectively and appropriately in culturally based situations. The classes are conducted in Spanish. A Spanish immersion experience may be offered.

Spanish 4 ***1 cr*** ***Prerequisite: Spanish 3***

Spanish 5 ***1 cr*** ***11, 12***

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: Spanish 4***

Spanish 4/5 is a combined course with a curriculum that repeats every two years. Spanish 4/5 offers students a total experience in Spanish language immersion. Students continue to develop the four language skills of listening comprehension, speaking, reading and writing with the emphasis on more sophisticated grammatical structure. Students must participate in daily discussions, present oral reports, prepare essays on a variety of topics and explore readings from various sources. The course uses culturally authentic materials. A Spanish overseas experience may be offered at this level.

PHYSICAL EDUCATION & HEALTH

❧ Health 1/2 cr Required: 9, 10

A1, A2, S1, S2, S3, C1, C2, C3

The health class is intended to examine the physical, emotional, intellectual, and social aspects of life. Emphasis will be placed on wellness and students taking responsibility for their own health. Students will learn about life style factors which contribute to wellness.

❧ PE Cooperative/Team Activities 1/2 cr 9, 10

A1, S 1, S2, S3

The purpose of this course is to introduce the student to activities that focus on cooperative activities such as team building and adventure education while also learning the important values of working as a team. In this course students will learn strategies and skills that will enable them to participate and understand team sports such as: soccer, flag football, field hockey, basketball, softball, floor hockey and ultimate frisbee to name a few.

❧ PE Life Time Activities 1/2 cr 9, 10

A1, S1, S2, S3

The purpose of this course is to prepare the student with skills in the area of life time sports such as: archery, golf, tennis, badminton, pickle ball, running, strength training to name a few. The students will not only learn valuable skills that will allow them to enjoy these activities, but they will gain a better understanding of how each activity can help them socially once they leave high school.

Personal Fitness 1/2 cr 10 (with instructor's permission),11, 12

A1, A2, S2, S3, C1

The focus of this course will help students to develop a personal physical activity plan that will enable them to understand and utilize cardiovascular fitness, physical activity and fat control, muscular endurance, strength, flexibility, and fitness management for the future. The class is offered as an alternative physical education elective for juniors and seniors.

Single Gender PE (Female) ***1/2 cr*** ***10, 11, 12***
Single Gender PE (Male) ***1/2 cr*** ***10, 11, 12***

A1, S1, S2, S3

These two courses (separate, of course) are designed to maximize participation in PE. By increasing the comfort level of each student, he/she may feel more ready to work on muscular fitness and cardiovascular capacity. Activities will vary based on the interest of the students involved. Lifetime sports and individual fitness will be included. These classes are offered as alternatives to the traditional physical education class for sophomores, juniors, and seniors.

E Adventure Education *1/2 cr* *10,11,12*

A1, A2, S1, S2, S3, C1, C2

This physical education course is open to students in grades 10-12 who enjoy the outdoors, enjoy challenging themselves, and are willing to work with other students. The primary goal of this class is to learn how to participate safely in the following adventure-based activities: backpacking, rock climbing, biking, orienteering, ropes course/challenge, wilderness survival, snowshoeing, shelter making, and kayaking/canoeing. Secondary goals include, but are not limited to, increasing a student's self-confidence, self-reliance, self-awareness, and the ability to understand the needs of others. Keeping a journal is a requirement through all activities.

Hopkinton High School in 1903, when it was on School Street in Contoocook.

PROJECT LEAD THE WAY

Project Lead the Way is designed to help students explore technology related careers and to prepare them for two- and four-year colleges and/or technology-based degree programs. Each class is taught in a laboratory setting using state-of-the-art technology, equipment, and software. Instruction is generally one-third theory and two-thirds application, with involvement of mentors from industry and colleges. Class activities focus on problem-solving, requiring students to work in teams to generate solutions. Students may have the option to earn college credit, when possible, through college articulation agreements, offering a seamless link between high school and college.

Typically, students who enjoy math and science will benefit from exploring at least part of the program. The program is aimed at both the student who is working towards a career in engineering and the student whose career choice is technical in nature. Students who do not perform well in the mathematics sequence are not recommended for this program.

ICT, P Introduction to Engineering Design (IED) 1 cr 9,10,11,12

A1, A2, A3, S1, S2, S3, C1, C2, C3

Have you tried to design something new or draw up an idea you wanted to share with your friends and wondered how you could communicate your idea? Or, have you wondered how someone designed that new MP3 player or sleek new phone? The Introduction to Engineering Design™ is the course for you. The major focus of the course is learning how to take an idea through a design process that will eventually be manufactured or produced. As you learn about various aspects of engineering and engineering design, such as how engineers communicate through drawing, you will apply what you learn through various activities, projects, and problems. For example, after learning about the different techniques engineers use in determining how to design a product, you and your teacher will have the flexibility to explore the design and engineering processes to solve problems that are of interest to you. The course covers the following:

The Role of an Engineer
The Design Process
Product Design
Product Analysis and Improvement
Designing as an Engineer

In addition, you will use Inventor, which is a state of the art 3-D design software package from AutoDesk, to help you design solutions to different design projects. Working in teams, you will learn about documenting your solutions, solving problems, and communicating your solutions to other students and members of the professional community of engineering and engineering design. Introduction to Engineering Design™ is intended to serve as a foundation course within the Project Lead The Way® course sequence. All of the topics learned in this course will be used in future courses. **This course is part of the Project Running Start Program. Students may earn four college credits through the New Hampshire Technical Institute for a $150 fee.**

ICT, P Principles of Engineering 1 cr 10, 11, 12

A1, A2, A3, S1, S2, S3, C2 ***Prereq.: Intro to Eng. Design or permission***

Principles of Engineering is a broad-based survey course designed to help students understand the field of engineering and technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering and technical systems and manufacturing processes. They will also learn how engineers and technicians address concerns about the social and political consequences of technological change. The main purpose of the course is to experience, through theory and hands-on problem solving, activities that clarify what engineering and manufacturing is all about and to answer the question, "Is a career in engineering or engineering technology for me?" Principles of Engineering is intended to serve as a foundation course within the Project Lead The Way® course sequence. All of the topics learned in this course will be used in future courses. **This course is part of the Project Running Start Program. Students may earn four college credits through the New Hampshire Technical Institute for a $150 fee.**

ICT, P Digital Electronics 1 cr 10, 11, 12

Primary: A1, A2, A4 Secondary: A3, S, C1, C2

Prerequisite: Intro to Eng. Design or permission

Digital Electronics (DE) is the study of electronic circuits that are used to process and control digital signals. In contrast to analog electronics, where information is represented by a continuously varying voltage, digital signals are represented by two discreet voltages or logic levels. This distinction allows for greater signal speed and storage capabilities and has revolutionized the world electronics. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras, high definition televisions, etc.

The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.

Utilizing the activity-project-problem-based teaching and learning pedagogy, students will analyze, design and build digital electronic circuits. While implementing these designs students will continually hone their interpersonal skills, creative abilities and understanding of the design process.

Digital Electronics is a high school level course that is appropriate for 10th or 11th grade students interested in electronics. Other than their concurrent enrollment in college preparatory mathematics and science courses, this course assumes no previous knowledge.

Digital Electronics is one of three foundation courses in the Project Lead The Way high school pre-engineering program. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology. **This course is part of the Project Running Start Program. Students may earn four college credits through the New Hampshire Technical Institute for a $150 fee.**

ICT, P Computer Science and Engineering 1 cr 10, 11, 12

A1, A2, A3, S1, C2, C3 Prerequisites: permission

This course, falling within PLTW's Pathway to Engineering, is project-and problem-based, with students working in teams to develop computational thinking and solve open-ended, practical problems that occur in the real world. The course aligns with the College Board's new CS Principles framework. The course is not a programming language course; it aims instead to develop computational thinking, to generate excitement about the field of computing, and to introduce computational tools that foster creativity.The four areas of concentration are as follows: Unit 1: Graphics (Computer Science), Unit 2: The Web (Web Design and Information Technology, Unit 3: Data Mining (Information Science) and Unit 4: Simulation (Software Engineering).

ICT, P Aerospace Engineering 1 cr 10, 11, 12

A1, A2, A3, S1, S2, S3, C1, C2 Prereq.: Principles of Engineering or permission

The major focus of the Aerospace Engineering TM (AE) course is to expose students to the world of aeronautics, flight, and engineering. Students will be introduced to the Project Lead The Way activity-based, project-based, and problem-based learning through exploring the world of aerospace engineering. Students should have experience in physics, mathematics and technology education. They will employ engineering and scientific concepts in the solu-

tion of aerospace problems. The entire curriculum sequence will include experiences from the diverse fields of Aeronautics, Aerospace EngineeringTM, and related areas of study. Lessons will engage students in engineering design problems related to aerospace information systems, astronautics, rocketry, propulsion, the physics of space science, space life sciences, the biology of space science, principles of aeronautics, structures and materials, and systems engineering.

It is recommended that students are concurrently enrolled in college preparatory mathematics and science courses and have successfully completed the Principles of Engineering (POE).

ICT, P Computer Integrated Manufacturing 1 cr 11, 12

A1, A2, A3, S1, C2, C3

Prerequisites: Intro to Eng. Design or Principles of Engineering

Computer Integrated Manufacturing is a course that applies the competencies developed in Principles of Engineering and Digital Electronics. Students learn the industrial applications of electromechanical technology as it relates to automation and robotics. A state of the art Computer Numeric Control (CNC) machining center and robotic parts handling system enables students to learn about automation and Flexible Manufacturing Systems (FMS) concepts. Machine control language for cutter tool path programming is taught along with automatic tool path generation utilizing a computer interface with the machining center. The course also includes the planning and implementation of a completely automated manufacturing system mode. CIM is intended to serve as a specialization course within the Project Lead The Way® sequence. **(Four College credits available from NHTI for $150 or RIT for $200)**

ICT, E Civil Engineering and Architecture (CEA) 1 cr 11, 12

A1, A2, A3, S1, C2, C3 ***Prerequisites: Permission of instructor***

Ever think about building a house, a store, a restaurant, and wondered how to go about it? Then Civil Engineering and Architecture is the course for you. The major focus of the course is a long-term project that involves the development of a local property site. As you learn about various aspects of civil engineering and architecture, you will apply what you learn to the design and development of this property. There is flexibility for you and your teacher in developing the property as a simulation or as a real-world experience that civil engineers and architects experience in their jobs. The course covers the following:

- The Roles of Civil Engineers and Architects
- Project Planning
- Site Planning

- Building Design
- Project Documentation and Presentation

In addition, you will use a state of the art 3D design software package to help you design solutions to solve your major course project. Working in teams, you will learn about documenting your project, solving problems, and communicating your solutions to other students and members of the professional community of civil engineering and architecture. CEA is intended to serve as a specialization course within the Project Lead The Way® sequence.

ICT, E Engineering Design and Development 1 cr 11, 12

A1, A2, A3, S1, C2, C3 ***Prerequisite: Permission of instructor***

Engineering Design and Development is a project-based course in which students will be required to apply the skills and knowledge acquired in previous courses to solve engineering problems. Students will be required to work independently in small work groups to systematically arrive at solutions to engineering problems. EDD is intended to serve as the capstone course within the Project Lead The Way® sequence. This course can be taken as an Independent Study with the instructor's approval.

SCHOOL TO CAREER

The School to Career program offers students several approaches to contextual learning as a valuable supplement to traditional secondary education. Students may choose from the options described below.

❧ Career Pathways 1/2 Required:11

A1, A3, S1, C1, C2, C3

In this class, offered through our Guidance Department, students will have the opportunity to explore a variety of careers and to begin their individual career decision making process. Students will assess their interests, aptitudes, values, and personality traits and will learn which careers match their profile. Students will create a portfolio which will include a resume and cover letter. Students will learn about the job selection process, from job hunting, to interviewing, to salary and benefits packages. Guest speakers from a variety of professions will provide insight, information, and advice about career pathways. Over the course of the semester, each student will be required to complete two different job shadows. They will spend part or all of one day each time observing a professional in the workplace and asking questions. This portion of the class will fulfill half of their Experiential Learning graduation requirement.

E Internships 1/4 - 1 cr 10, 11,12

A1, A2, A3, S1, C1, C2

Internships are available to students as a means of exploring a career or field of interest. All internships must be pre-arranged with the Career Counselor. Every effort will be made to match students with their career of choice. Each internship will utilize the best practices of R2P2: Research, Reflection, Product, and Presentation. Students will be required to maintain a log of their hours and tasks completed, as well as to complete a final project and presentation. Student interns are monitored by the Career Counselor.

E Exploring Teaching 1/2 cr 11, 12

A1, A2, A3, S1, S2, C1, C2

This internship is for students with an interest in a career in the field of education. In this internship students will experience all facets of teaching, allowing students to gain an understanding of what is involved in being a professional educator and what career options are available. The Career Counselor at Hopkinton High School will arrange this internship.

Students will be assigned a teacher mentor in or out of the district at a preferred level and/or subject area. Exploring teaching interns will be monitored by their site mentor and by the Career Counselor and will follow the same R2P2 (Research, Reflection, Product and Presentation) model used by all interns.

Peer-to-Peer Internships *1/4 - 1/2 cr* *9-12*

A1, A2, S1, S2, C1, C2

This internship is designed to enhance true inclusion in our district by creating a school climate and opportunities where students with and without disabilities are able to connect in order to develop meaningful and reciprocal relationships. Students will be given opportunities and will be encouraged by school district staff in a more formal way to spend time with these students in classes. Students are required to log their hours and tasks completed, and to write a research-based reflection paper at the end of the semester.

And More...

Additional school to career activities might include job shadowing, short term internships, career rotations, informational interviews and workplace tours. These experiences, arranged by the Career Counselor, are available to students of all grade levels, and are not necessarily activities for credit.

SCIENCE

"Starting with the class of 2019 (entering freshmen in the fall of 2015), graduation requirements for science are changed to 1 credit Earth Systems Science, 1 credit Biology, and 1 credit in a physical science. We recommend that students take at least 4 credits of science. Many advanced and regular level options are offered."

❧ Integrated Science 9: Earth Systems 2 1 cr Required: 9

A1, A2, A3, S1, S2, S3, C1, C2, C3

Earth Systems Science is the culmination of a 4 year integrated science program which began in grade 6. The course design revolves around the relationship between the major geological and life systems of dynamic planet Earth. Students will review and apply the principles of chemistry and physics that explain these systems. Analysis of the applicable general themes of science will occur within each unit as well as the science processes used to gain understanding of these complex systems on which life not only depends but is part of. Study skills that are necessary for the successful understanding of high school level science concepts will be emphasized. Specific units of study include plate tectonics, earth's atmosphere, water, ecosystems, and evolution. **Honors section available**.

❧ Biology 1 cr Required: 10

A1, A2, A3, S1, S2, S3, C1, C2, C3

Biology will be taught as a laboratory science class. Students will perform laboratory investigations of teacher and student design. Topics to be covered are the scientific method as it relates to biology, chemistry of biology, energy in living systems, cells, cell reproduction, heredity, evolution, systems within living organisms, populations, and ecosystems. **Honors section available**.

Chemistry 1 cr 10, 11, 12

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prereq: Algebra 2 or 2B (may be taked concurrently)***

Chemistry is the study of the composition, structure and properties of substances and the changes they undergo. Content will be mastered by lecture, demonstration, and laboratory exploration. Mathematics will be used to explain and understand much of the scientific phenomena encountered. Major topics include: atomic structure, periodicity, bonding, acids and bases, equilibrium, thermodynamics, and descriptive chemistry. This course will meet the needs of students wishing to pursue a career in science, medicine, or engineering or the needs of students wishing to stimulate their intellectual curiosity regarding the physical world.

Introduction to Chemistry and Physics *1 cr* *11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: Biology, Algebra 1A or 1B***

Introduction to Chemistry and Physics provides a creative, hands-on overview of chemistry and physics. Chemical and physical concepts will be explored through a great variety of high interest laboratory experiments. The course will conclude with an introduction to astronomy, in which chemistry and physics come together. Most principles in this course will also be addressed in Chemistry and General Physics, but there will be less emphasis on mathematics and more emphasis on laboratory skills. This course suits the needs of students wishing to pursue an associate's or bachelor's degree in a college non-science major. It will also prepare students for the high school Chemistry or General Physics courses.

AP Chemistry *1 cr* *11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisites: grade of C or better in Chem. and Alg. 2, strongly recommended: Pre-calculus (may be taken concurrently)***

AP Chemistry covers the same topics taught in first year chemistry, but in greater depth and with greater use of mathematics. Laboratory work will involve greater sophistication. The goal of the course is to prepare the student for success on the College Board Advanced Placement Exam such that college credit will be awarded. **This course is part of the Project Running Start Program. Students may earn eight college credits through the New Hampshire Technical Institute for a $300 fee.**

General Physics *1 cr* *10, 11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: Algebra 2 or 2B (may be taken concurrently), recommended: Advanced Algebra or Pre-calculus (may be taken concurrently)***

Physics is the study of matter, energy fields, and the interactions between them. This course spirals throughout the year through the five themes of solid mechanics, fluid mechanics, electricity and magnetism, thermodynamics, and wave mechanics in a curriculum that stresses the understanding and hands-on application of basic principles that govern the world around us. Physics is the final course of the core science curriculum.

AP Physics Mechanics *1 cr* *11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: Calculus (may be taken concurrently)***

This is an advanced course modeled after the AP Physics "C" Mechanics course. This course covers Newtonian mechanics, kinematics, universal gravitation, thermodynamics, and wave theory in depth and in a calculus context. It is the equivalent of a semester of advanced college physics with lab in a small classroom setting, with a cooperative atmosphere, and with

plenty of hands-on activities and empirical analysis. This course is designed for students intent on entering a major in science, engineering, pre-med, or mathematics. **This course is part of the Project Running Start Program. Students may earn eight college credits through the New Hampshire Technical Institute for a $300 fee.**

AP Physics Electromagnetics *1 cr* *11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3

Prerequisites: Calculus and Physics Mechanics (either or both may be taken concurrently)

This is an advanced course modeled after the AP Physics "C" Electromagnetics course. This course covers electrical fields and potential, Gauss' Law, Ohm's Law and circuits, Kirchoff's Law, quantum electricity, electromagnetic induction, Maxwell's Equations, and electrical thermodynamics in depth and in a second-year calculus context. It is the equivalent of a semester of advanced college physics with lab in a small classroom setting, with a cooperative atmosphere, and with plenty of hands-on activities and empirical analysis. This course is designed for students intent on entering a major in science, engineering, pre-med, or mathematics.

ICT, E GIS & Natural Resource Management *1 cr* *11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: Biology***

In GIS, students will learn ecological field techniques including sampling and identifying animal track and sign, plants, animals, and habitat types (forests, wetlands, and vernal pools). Significant time will be spent locally in the field gathering data. This course will also offer instruction of ArcView (ArcGIS), a state-of-the-art Geographic Information System (GIS) program that creates digital maps. Upon mastery of field and mapping techniques we will create thematic and analytical maps utilizing student collected data as well as state and national data. These maps will be used to try to understand various concerns relating to resource management and the relationship between natural resources and expanding human needs. This course can be a precursor to Ecology. **This course is part of the Project Running Start Program. Students may earn three college credits through the New Hampshire Technical Institute for a $150 fee.**

Ecology *1 cr* *11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisite: Biology and Introduction to Chemistry and Physics or Chemistry (Chemistry may be taken concurrently)***

Ecology is a relatively new science elective for juniors and seniors. Students will experience a balance between time spent in the classroom learning basic ecological theory with time

spent in the field applying these concepts. Students will investigate local and global issues relating to human environmental impact such as logging in the White Mountain National Forest, management of wild animal species, waste water treatment, and atmospheric pollution. This is the only high school elective which involves the Earth Sciences and has a significant Oceanography component. Field trips are an important part of the course. Examples of potential field trips include a day trip to New Hampshire's seacoast, an overnight to Cape Cod, as well as studying local areas during class time. Honors credit available. This course is formally differentiated to allow for honors credit. The student must commit to this path at the beginning of the course. Many classroom activities may be different, assessments may be different, even the text may be different for honors and non-honors students. Withdrawal from the honors option would require approval from administration, guidance and parent. **This course is part of the Project Running Start Program. Students may earn three or four college credits through the New Hampshire Technical Institute for a $150 fee.**

Biology 2 *1 cr* *11, 12*

A1, A2, A3, S1, S2, S3, C1, C2, C3 ***Prerequisites: Biology and Chemistry***

This course is designed to be a hybrid between AP Biology and AP Anatomy and Physiology. The goal is to appeal to a broader audience. However, additional tutoring, testing, and labs will be offered for those students who wish to prepare for the AP Biology exam. Topics covered in depth are biochemistry, molecular genetics, evolution, and anatomy and physiology. Students will be required to do extensive lab work and independent research. This course is suggested for any student considering a college major within the biological sciences, including pre-med, pre-vet, physical therapy and nursing. **This course is part of the Project Running Start Program. Students may earn eight college credits through the New Hampshire Technical Institute for a $300 fee.**

SOCIAL STUDIES

❧ World Cultures — 1/2 cr — Required: 9 (Fall)

A1, A3

World Cultures helps students gain a better understanding of the modern world and international issues. The course focuses on regions of the world such as Latin America, Europe, the Middle East, and sub-Saharan Africa. As students study particular regions, they review maps and aspects of physical geography, but the course emphasizes cultural geography—customs, social organization, beliefs, and other aspects of everyday life. **Honors section available**. *This course satisfies the 1/2-credit NH state graduation requirement in global studies.*

❧ Early American History — 1/2 cr — 9 (Spring)

A1, A3

Early American History serves as the first part of a three-semester sequence of American history. The focus of the second half of freshman year in social studies is America's past and this course uses a chronological approach to study the period from 1600 to 1815. Major topics include European settlement, colonial development, the American Revolution, and the early republic. The course also builds on the organization, information-gathering, and thinking skills introduced in World Cultures in order to prepare students to succeed in American History as sophomores. **Honors section available**.

❧ American History — 1 cr — Required: 10

A1, A2, A3, S2, C3

American History is a year-long course that uses a chronological approach to study the period from 1815 to 2001. It goes beyond traditional political and military history to explore everyday life in the past. The course includes topics on art, music, literature, and other subjects that enhance the study of history. Themes in America's history are also an important component of the course. **Honors section available**. *This course satisfies the 1-credit NH state graduation requirement in US History.*

❧ Honors American Studies — 2 cr (Eng & Hist) — Required: 10

A1, A3 — ***Prerequisite: English 9***

American Studies is an honors-level course, co-taught by an English and a history teacher. During the year, students will study the period from 1815 to 2001, learning about Ameri-

can history and the American literary tradition. They will also explore everyday life in the past, making connections among art, music, literature and non-fiction. Students will develop research, writing, and analytical reading skills. *This course satisfies the 1-credit NH state graduation requirement in US History.*

AP U.S. History — *1 cr* — *10*, 11, 12*

A1, A2, S1, S2, S3, C2

Prerequisite: An Early American History course or department permission

AP US History simulates a college-level two-course introductory sequence on American history and thus emphasizes mastery of both a large amount of content information and advanced academic skills such as analyzing primary source documents and writing scholarly essays. Both the breadth and the depth of study are greater than in American Studies-History. The course also emphasizes preparation for the College Board's AP US History exam in May. *This course satisfies the 1-credit NH state graduation requirement in US History.*
** With instructor approval*

Global Issues — *1/2 cr* — *10, 11, 12*

A1, A2, A3, C2, C3

Global Issues emphasizes current international social, political, and economic issues. Instead of a textbook, the course uses Internet sites, periodicals, and other sources to learn about current events of international importance. Subjects range from sporting events to armed conflicts. The class will examine the most substantial issues in greater depth by glimpsing their history and learning about their contemporary context. *This course satisfies the 1/2-credit NH state graduation requirement in global studies.*

Asian Studies — *1/2 cr* — *10, 11, 12*

This course focuses on Asian societies, particularly India, China, and Japan. The class explores international conflicts, economic development, modern culture, and other topics using history, music, religion, and other topics. *This course satisfies the 1/2-credit NH state graduation requirement in global studies.*

Western Civilization — *1/2 cr* — *10, 11, 12*

A1, A3

This course elaborates on topics introduced in the department's 8th grade survey course in

World History related to the history of Western Europe. Topics include the development of the Roman Empire, the spread of Christianity, the Medieval era, the Renaissance and the Age of Absolutism.

Introduction to Law *1/2 cr* *10, 11, 12*

A1, A2, C1, C3

This course explores the basic elements of the criminal justice system, including criminal law, police procedures, criminal trials, and sentencing. It also examines tort, or civil, law while placing an emphasis on tort categories and defenses. Students will also have an opportunity to study the two basic elements of consumer law, contracts and warranties, spend a day with a Hopkinton patrol officer in a long-running "ride along program," and sit in on a trial at District or Superior Court.

Sociology *1/2 cr* *10, 11, 12*

A1, S1, C2

Sociology focuses on human society. Key subjects include the desires of individuals, the nature of groups, and the interaction between them. Modern America and its recent history provide the main setting for exploring topics like socialization, discrimination, conformity, and life stages.

Psychology *1/2 cr* *10, 11, 12*

A1, A2, A3, S1, C2

Psychology is designed to introduce students to the essential tenets of psychology: perspective, methods of conditioning, schools of thought, abnormal behaviors, and intelligence & testing.

Psychology II *1/2 cr* *11, 12*

A1, A3 ***Prerequisite: Psychology***

Psychology II is designed to meet the needs of those students who want to further explore issues in psychology. Topics covered will include physiology, sensation, perceptions, memory and therapeutic models. Students will engage in a number of collective activities and independently research a topic of their choice.

AP Psychology *1 cr* *11, 12*

A1, S1, C2

AP Psychology introduces students to the systematic and scientific study of the behavior and mental processes of human beings. The course exposes students to the facts, principles, and phenomena associated with each of the major subfields within psychology as well as the methods psychologists employ. AP Psychology simulates an introductory-level college course and prepares students for the College Board's AP Psychology exam.

❧ *Economics* *1/2 cr* *Required: 11, 12*

A1, A2, A3, C2

Economics is not designed as a consumer economics course but as a course that describes the basic economic problems that all societies face. Topics include basic economic concepts, supply and demand, market structures, fiscal policy and taxation, financial markets, international trade, economic cycles, and comparative economic systems. The course will enable students to better understand the significance of economics in their daily lives. *This course satisfies the 1/2-credit NH state graduation requirement in Economics*.

Honors Economics *1/2 cr* *11, 12*

A1, A2, A3, C2

Honors Economics covers all of the topics addressed in Economics as well as monetary policy. The expectations for the course will be more rigorous, more in-depth, and require greater levels of independent student work. *This course satisfies the 1/2 credit NH state graduation requirement in Economics*.

AP World History *1 cr* *10*,11, 12*

A1

Advanced Placement World History is a rigorous course that simulates a two-course sequence for freshmen in college. The content of the course is human history from 8000 B.C.E. to the modern era. The goal of the course includes both providing students an understanding of global history as well as helping them become proficient with the skills they will need in upper-level college courses. AP World History will therefore emphasize the development of analytical and writing skills as well as acquisition of content knowledge. Notable skill work includes critically evaluating primary and secondary sources, studying the methods used by scholars to create history, and discerning similarities among

the histories of various civilizations. The course will include preparation for the College Board's AP exam in the subject and is thus includes intensive reading and writing.
* With instructor approval

❧ *Civics* *1/2 cr* *Required: 12*

A1, A2, A3, S1, S2, C1, C2, C3

Civics provides students with a fundamental and practical understanding of local, state and national government. The philosophical underpinnings of democracy act as a base as students learn about various levels of government. Students enhance their understanding of the structure and operation of government by completing traditional coursework, participating in simulations, listening to guest speakers, going on field trips, and being active citizens. *This course satisfies the 1/2-credit NH state graduation requirement in Civics & Governments.*

TECHNICAL EDUCATION

P Wood Technology *1/2 cr* *9, 10, 11, 12*

A1, A2, A3, S1, C2

Wood Technology is available to any high school student regardless of previous experience. Students will learn the fundamentals of working with wood, including project selection and design, use of hand tools and stationary power tools, joinery, fabrication, assembly processes, use of jigs and fixtures, and finishing. Instruction is provided to the class, as well as on an individual basis, allowing for different skill and capability levels. Projects are chosen by students from an extensive library of plans. **Students may repeat this course at an advanced project level.**

P Technical Woodworking *1/2 cr* *9, 10,11, 12,*

A1, A2, A3, S1, C2

Technical Woodworking provides students with individualized instruction in intermediate and advanced woodworking skills and techniques. This course is designed for students who wish to expand and refine their woodworking skills with more attention devoted to detail and craftsmanship. Advanced Woodworking techniques are used to problem-solve, plan, and design projects produced from various hardwoods. Projects are designed by students or chosen from an extensive library of plans by the Instructor. **Students may repeat this course at an advanced project level.**

F & P Lathe Turning *1/2 cr* *9, 10, 11, 12*

A1, A2, A3, S1, C2

Lathe Turning is available to any high school student regardless of previous experience. This course is for students who want to explore wood technology with emphasis in lathe turning. The course content includes instruction in both spindle and faceplate turning, lathe safety, and basic turning skills using a bowl gouge, skew chisel, parting tool, and spindle gouge. Students select from a variety of projects including pen making, bowl turning, goblets, jewelry, and a wide range of additional lathe turning projects. The course content is reinforced by laboratory activities, product selection, design, production, and safety. **Students may repeat this course at an advanced project level.**

SUPPORT SERVICES

Students in grades 9-12 identified to be in need of specialized services can receive support in their academic classes through program modifications. This could include practical versions of some classes. In addition, the Learning Center can provide additional support, tutorial and remedial services. Students receive individual and/or small group instruction in a variety of settings throughout the school. Additional services are available as identified in an individual student's Individualized Education Program (IEP) or 504 Plan.

Social Cognition 1 — 1/2 cr — 9, 10, 11, 12

Prerequisite: Permission of instructor

This course is designed to be a personal journey for the student. Students will take an active role in learning and developing behaviors necessary for success in school and everyday settings. Students will understand the development of physical, social, intellectual, and emotional aspects unique to adolescents.

Social Cognition 2 — 1/2 cr — 10, 11, 12

Prerequisite: Social Cognition 1 and permission of instructor

The students, along with discovering the ability to create change and solve real-world problems, will investigate career planning and will generate a service project as a culminating activity.

Connections Café — 1/2 cr — 12

Prerequisite: Permission of instructor

This course offers a step-by-step process for transitioning from high school to the next steps beyond graduation. Students initiate the process with goal clarification, and move through the steps necessary to reach their individual goal, including completing college, job, and/or military applications, exploring funding sources for future training, visiting local campuses or job sites (based on individual goals and needs), rehearsing interview skills through class presentations of their goals and process, and examining day-to-day skills necessary for successful independent living. In addition, group activities which emphasize communication, teamwork, and leadership are woven into the program. Underlying this process is the academic goal of helping students cultivate executive functioning skills (establishing goals, making decisions, setting priorities, sequential planning, solving problems, monitoring results, and revising the

plan).

Foundations of Learning 1 *1/4 cr* *9, 10*

Prerequisite: Case Manager approval

This course is designed to provide instruction in skill development. Students will take an active role in independent academic goals and objectives, self determination in preparation for post secondary education/employment, and executive functioning as related to purposeful directed problem solving behaviors.

Foundations of Learning 2 *1/4 cr* *10, 11*

Prerequisite: Foundations of Learning 1, Case Manager approval

This course is a continuation of Foundations of Learning 1 in skill development. Students will develop a portfolio relevant to future education/training/employment connecting to their career interests, work skills, and learning style. Students will determine strategies for academic success, participate in articulation of strengths and obstacles to learning, and identify adjustments for challenges they might face as they transition to future goals.

ADDITIONAL CREDIT OPPORTUNITIES

Extended Learning Opportunities 1/4 - 1 cr *9,10,11,12*

A1, A2, A3, A4, S, C1, C2 As applicable to ELO description

Purpose: The Hopkinton School District supports the use of Extended Learning Opportunities (ELOs) as a means of meeting the diverse intructional needs of students with different talents, interests, and development. Extended Learning Opportunities may include, but are not limited to, independent study, personalized instruction, internships, online courses/distance education, or other opportunities approved by the Superintendent or Principal, in conjunction with school board policies. *ELOs, in some cases, may satisfy the experiential learning requirement.*

Awarding of Credit: In general, students will be limited to a total of four ELOs obtained through the Extended Learning Opportunity process. Extended Learning Opportunities can be utilized for credit acquisition or credit recovery purposes.

Extended Learning Opportunity Standards: For an Extended Learning Opportunity to be approved for credit, the following must be established prior to implementation:

- Course Competencies
- Assessment Techniques
- All ELOs will incorporate research, reflection, product and presentation

The Extended Learning Opportunity must present rigorous, measureable standards comparable to established course competencies.

Application Process: Please see your guidance counselor to discuss the planning process.

Extended Learning Opportunities Costs: Students and/or parents/guardians shall be responsible for the costs associated with Extended Learning Opportunities (excluding approved independent studies utilizing school district personnel). In compelling circumstances, the District may pay a portion of the expenses. The Principal and Superintendent must approve any such request.

Independent Study *1/4 – 1 cr* *10, 11, 12*

A student may assume the responsibility of taking a course as Independent Study, provided the following requirements are met:

- The course is not available to the student as a standard offering of the school or the student has demonstrated knowledge and mastery of the subject which is significantly beyond that taught in the standard course.
- A faculty member plans, supervises, and evaluates the course-work which the student will produce.
- **Proposal deadline is the second Friday of each semester.**
- Contracts, available in the Guidance Office, must be completed and approved by administration prior to the start of the independent study.

Peer Instruction *1/4 cr* *10, 11, 12*

Students in grades 10-12, who are in good academic standing and who have special talents, are encouraged to use their free time in service to their fellow students. Peer instructors work under the direction of teachers in a variety of capacities, including one-to-one tutoring, small group tutoring, laboratory preparation, or skills demonstration. **Note**: Peer instruction is taken in addition to a student's normal course load. Peer Instruction will be graded on a pass/fail basis. Forms are available in the Guidance office. Consultation with Guidance is **required** prior to form availability. This elective is not recommended as an eighth class, leaving no opportunity for study hall.

Driver Education *1/4 cr* *9, 10, 11, 12*

Prerequisite: Student must be 16 by the last scheduled class of the course.

Eligibility for enrollment in this course will be according to birth date. The class is set up according to standards of Hopkinton School District and the State of N.H. and consists of 30 classroom hours and 10 driving hours. Emphasis is given to motor vehicle laws, defensive driving, and safety. The cost of the course is $550 and must be paid by the student. The course is offered each quarter and once in the summer.

VLACS courses (Virtual Learning Academy) 1/2 - 1 cr *9, 10, 11, 12*

The Virtual Learning Academy offers a variety of free on-line courses which meet NH State Standards. VLACS is the only on-line program that Hopkinton High School recognizes for credit on our transcript and accepts these courses with the following guidelines:

- Students may take up to 4 VLACS courses for credit during the student's high school career. Courses must be pre-approved by Guidance and an administrator and a guid-

ance form must be completed. Exceptions may be granted by Guidance and Administration after careful consideration. (1 VLACS course stands for 1 of the 4 ELO opportunities.)

• Courses should not be graduation requirements (unless there is a compelling reason, and this must be requested in advance).

• Courses that are currently offered at Hopkinton High School may not be taken unless there is a compelling reason, and the request has been approved by Guidance and Administration in advance.

• Final grades for virtual courses will be included in GPA. (Note: If a VLACS course is taken to fulfill a student's minimum academic load (see page 11), that student will not be eligible for honor roll.)

E Concord Reg. Technology Center 2 cr *11, 12*

Part time cooperative technical education is available to juniors and seniors, and through an arrangement with the Concord Technology Center (CRTC). Interested students may elect a program from the following:

Year One	Year Two
Automotive Technology I	Automotive Technology II
Construction Technology I	Construction Technology II
Cosmetology I	Cosmetology II
Culinary Arts I	Culinary Arts II
Graphic Arts and Digital Communications I	Graphic Arts & Digital Communications II
Health Science & Technology I	Health Science & Technology II
Teacher Preparation I	Teacher Preparation II
Extended Learning Opportunities	Extended Learning Opportunities
Paired Course A	Paired Course B
Criminal Justice: Criminology	Criminal Justice: Criminal Law
Fire Science: Firefighter I	Fire Science: EMT
Information Technology: Programming & Robotics	Information Technology: Computer Repair & Networking
Stagecraft: Technical Theatre	Stagecraft: Technical Theatre

* OFFERED IN A TWO-YEAR CTE SEQUENCE; CTE COMPLETERS ARE EXPECTED TO FINISH BOTH YEARS AND ARE GIVEN PREFERENCE FOR ADMISSION.
Students with a CRTC course as a part of their total academic program spend approxmately two and a half hours each day at the CRTC and the remainder of their day at Hopkinton. Student schedule adjustments are made when possible to accommodate the block of time in which it is necessary to travel from HHS to the Technology Center. Students may take academic courses at Hopkinton which complement their CRTC training.

Most programs offered by the Technology Center are comprised of two (2) years. It is important to recognize that those students enrolled in technology programs during their junior and senior years may satisfy some of the State's mandatory graduation requirements. For example:

2 yrs. - Graphic Arts satisfies 1/2 credit in fine arts
2 yrs. - Health Occupations satisfies 1 credit in science and 1/2 credit in health
2 yrs. - Information Technologies (ICT) satisfies ICT credit

Students earn two (2) credits per year for successfully completing a CRTC program, for a total of four (4) elective credits toward graduation requirements.

*Students who may consider CRTC in their junior/senior year should work closely with their school counselors in their freshman and sophomore years to be sure that their graduation requirements are met so as to allow for CRTC scheduling.
** Note: Admission into the second year of programming is a competitive process and not guaranteed.

Many CRTC classes qualify for Project Running Start/Dual Enrollment and articulation agreement relationships. These include:
• Automotive Technology
• Construction Technology
• Cosmetology
• Criminal Justice
• Culinary Arts
• Fire Science
• Graphic Arts And Digital Communication
• Health Science And Technology
• Information Technology
• Teacher Preparation

College Courses

*New Hampshire Technical Institute and Community Colleges**

Courses at NHTI-Concord are open to any Hopkinton student. Students will be held to the standards established by the course instructor at NHTI. Credits earned count as both college and high school credit. Grades will count toward the student's GPA. Students are required to pay course tuition to NHTI.

*New England College**

Courses at NEC are available to seniors on a space available basis for a nominal processing fee. Students will be held to the standards established by the course instructor at NEC. Credits earned count as both college and high school credit.

***Note:** If a college course is taken to fulfill a student's minimum academic load (see page 11), that student will not be eligible for honor roll during the first and/or third quarters.

eStart and SNHU Classes: Available online to sophomores, juniors and seniors at Hopkinton High School

These are semester long on line courses offered by our local (NH) Community Colleges. To view available courses and their syllabi, go on line to VLACS.org to course catalog and then to College. A Hopkinton High School senior must get permission from a guidance counselor to take appropriate courses and will have to pay the Community College System $150 per course with a maximum of two courses available toward high school graduation. The $150 cost of each course does not include the cost of text books which may range from $75 - $100 per course. Sign ups always begin early in the semester before the course is to begin. Students are required to register with VLACS as well as to print and complete the on-line registration form to be mailed with payment.

Hopkinton Middle /High School Core Values, Beliefs, & Learning Expectations

CORE VALUES AND BELIEFS

We foster a learning environment that is caring, safe, supportive, and respectful.

We promote personal integrity, intellectual curiosity, civic responsibility and resiliency.

We encourage continual growth through traditional and innovative opportunities.

ACADEMIC COMPETENCIES (A)

Working independently and cooperatively, students at Hopkinton Middle/High School acquire the skills, knowledge, and behaviors necessary to:

- Communicate ideas and information in written, spoken, and artistic modes; (A1)
- Identify, analyze and solve complex problems actively and creatively; (A2)
- Utilize instruments, tools, and technology of the digital age. (A3)

SOCIAL COMPETENCIES (S)

Working independently and cooperatively, students at Hopkinton Middle/High School acquire the skills, knowledge, and behaviors necessary to:

- Act with integrity, compassion, and respect; (S1)
- Participate in activities that promote wellness and social awareness; (S2)
- Connect with the natural world. (S3)

CIVIC COMPETENCIES (C)

Working independently and cooperatively, students at Hopkinton Middle/High School acquire the skills, knowledge, and behaviors necessary to:

- Contribute to the well-being of society; (C1)
- Act with consideration for the values of others; (C2)
- Honor and fulfill the responsibilities of citizenship. (C3)