# Hopkinton High School



Program of Studies 2019-2020

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#### **Hopkinton Middle High School**

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

Dear students,

We are pleased to present the 2019-2020 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 school counselor, teachers, friends, and parents or guardians. 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 2019-2020 school year.

Best of luck,

Christopher Kelley

Principal

Corrine Lajoie

Director of School Counseling

Corrine Lajoie

Grades 8, 9-12 (L-Z)

Rebecca Gagnon Assistant Principal

aSatoro

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

#### Mission, Philosophy, and Purpose

## **Hopkinton School District Mission Statement**

#### Above All, Care

#### **Tenets of Care**

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

Caring requires one to assume best intentions

Caring requires an acknowledgement of the caring act. Reciprocity is key to the continuation of care

#### **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 page 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	e other math course with	in 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	.5 credit	
American History	1 credit	
Economics	.5 credit	
Civics	.5 credit	
A social studies elective	.5 credit	
World Languages**	2 credits	3 credits
Physical Education	1 credit	1 credit
Fine Arts (Art, Music, Lathe)	.5 credit	1 credit
Information & Communication Technologies (ICT)***	.5 -1 credit	1 credit
Health	.5 credit	.5 credit
Careers****	.5 credit	.5 credit
Practical Art (pg. 13)	.5 credit	.5credit
Experiential Learning (pg. 13)	.5 credit	.5credit
Electives	4.5 credits	5 credits

Total 24 credits 29 credits

<sup>\*</sup> 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).

<sup>\*\*</sup> 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.

<sup>\*\*\*</sup> ICT: One credit if proficiency was not demonstrated by portfolio entering high school.

<sup>\*\*\*\*</sup> Careers Graduation Requirement: Students will take Career Pathways as a .5 credit class and will complete two job shadows over the course of the semester. These job shadows fulfill half 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 -	.5 credit
Early American History	5 credit
French, German, or Spanish 1 or 2	1 credit
Physical Education (1 semester)	.5 credit
Foundations of Tech. (ICT intro. course) 1	.5 credit
Health <sup>2</sup>	.5 credit
Fine Arts <sup>3</sup>	.5 credit
Elective(s)	

#### Grade 10 (minimum 6 credits)

American Literature	1 credit
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)	.5 credit
ICT (additional course) <sup>4</sup>	.5 credit
Fine Arts <sup>3</sup>	.5 credit
Elective(s)	

Students typically schedule at least 1 study hall per semester; (See rationale on page 11)

#### Notes:

- <sup>1</sup> Foundations of Technology must be taken if proficiency was not demonstrated through an ICT Portfolio entering high school.
- <sup>2</sup> .5 credit in Health must be taken in either grade 9 or grade 10.
- 3 .5 credit in Art, Music, or Lathe may be taken at any time, grades 9-12.
- <sup>4</sup> .5 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)**

1 credit Rhetoric & Composition or AP English Language & Composition 1 credit .5 credit English elective Mathematics > 1 credit A Physical Science 1 credit .5 credit Economics Social Studies elective .5 credit French, German, or Spanish 1 credit Career Pathways 1 .5 credit Experiential learning requirement .5 credit Practical learning requirement 5 credit Elective(s)

#### Grade 12 (minimum 5 credits)

AP english Literature & Composition or

English reading & writing electives 1 credit Mathematics 1 credit Science 1 credit Civics -.5 credit Social Studies elective .5 credit French, German, or Spanish 1 credit Experiential learning requirement .5 credit Practical learning requirement .5 credit Elective(s)

Students typically schedule at least 1 study hall per semester;. (See rationale on page 11.)

Notes:

<sup>&</sup>lt;sup>1</sup> 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 per semester. 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 per semester to qualify for the honor roll.
- All students in grade 12 **must** carry a minimum of **five courses** in their schedules per semester, 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 per semester to qualify for the honor roll. (See special qualifications, re: NEC, NHTI and VLACS, pg. 60 & 64)
- 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 twelve and no extenuating circumstances require the drop. Please consider carefully when making choices.

#### Honors Sections

Some sections of English, social studies, and science courses are offered in Honors level These courses are indicated in the descriptions. For admission into the honors courses, consideration incudes student's academic performance, teacher input, and the following criteria::

- 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 challenging work of students. A full slate of honors courses is not required. 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 (IED)
- Principles of Engineering (POE)
- Computer Integrated Manufacturing (CIM)
- Civil Engineering and Architecture
- Engineering Design and Development
- Computer Science Principles (listed under Computer Science/Technology)
- Aerospace 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. Courses are offered free for college credit for juniors and seniors and for a nominal fee for freshmen and sophomores. (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)
- · 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 Language & Composition, AP English Literature & Composition, AP World History, AP Psychology, AP Calculus AB, AP Calculus BC, AP Statistics, AP U.S. History\*, AP Physics Mechanics, 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 shadow, as part of the .5 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. (Graduation requirements include
  .5 credits in the category.)
- 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 Project Lead the Way courses.(Graduation requirements include .5 credits in this category.)

#### 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.

## **BUSINESS**

# P Business Mathematics 1cr (will not be offered in 2019-2020) 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. This course qualifies as a math experience but not a math credit. \*This course runs every other year. It will next run in 2020-2021.

# P College Accounting 1 1 cr 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.

We Encourage students who intend to major in Accounting, Computer Science, Business Administration, or Hotel Management 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. \*This course runs every other year. It will run in 2019-2020.

10, 11, 12

## P Marketing, Advertising, and Media Awareness 1 cr 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. \*This course runs every other year. It will run in 2019-2020.

## 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. \*This course runs every other year. It will next run in 2020-2021.

We encourage students who intend to major in Accounting, Computer Science, Business Administration, or Hotel Management to take this course.

# COMPUTER SCIENCE/COMPUTER TECHNOLOGY

ICT Foundations of Technology

.5 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

.5 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.

Using Python as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. PLTW is recognized by the College Board as an endorsed provider of curriculum and professional development for AP Computer Science Principles (AP CSP). This endorsement affirms that all components of PLTW CSP's offerings are aligned to the AP Curriculum Framework standards and the AP CSP assessment. This course meets the ICT "additional course" requirements.

ICT, P, E Like Social Media Marketing .5 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 support 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) .5 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
runs every other year. It will next run in 2020-2021.

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 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.



Contoocook Academy, ca 1856

## **ENGLISH**

Students will take required English courses in grades 9 and 10. During their junior year, students are required to take a Rhetoric and Composition class, either at a general or AP level. Juniors may also take additional reading or writing electives based on their interests and schedules. As seniors, students, studentsc take AP Literature and composition or choose at least one writing-based and one literature-based elective course to complete graduation requirements in English. Students must pass both English 9 and American Literature to enroll in a junior course. 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 Ter 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. A second major focus is reading. Students will 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 read 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 and summer work required** 

American Literature > 1 cr A1, A2, A3, S1, C2

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 literature, 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 and summer work required** 

Required: 10

Prerequisite: English 9

## Rhetoric and Composition

1 cr

1 cr

11

#### A1, A2, A3, S1, C2

Prerequisite: American Literature

Rhetoric and Composition is designed to help students become skilled readers of non-fiction prose written in a variety of rhetorical contexts and become skilled writers who compose for a variety of purposes. The course introduces students to the various reasons writers compose and the decisions that writers make when they are composing a text for a particular audience. Students will study a variety of non-fiction forms, including essays, speeches, and visual texts. Students will engage in rhetorical analysis, argument, debate, and synthesis of primary documents and visual texts. Their study of these forms of writing will influence their own writing. This course fulfills both a writing and a literature requirement.

# AP English Language and Composition A1, A2, A3, S1 and C2

11

AP English Language and Composition is a college-level course designed to help students become skilled readers of non-fiction prose written in a variety of rhetorical contexts and become skilled writers who compose for a variety of purposes and audiences. This course focuses on the study and analysis of not only the English language, but also nonfiction literature, including essays and speeches from some of America's and the world's most noteworthy authors. Students engage in rhetorical analysis, argument, debate, and synthesis of primary documents and visual texts. Each unit includes writing activities and presentation opportunities, as well as grammar and usage study, analysis of language and style, and AP exam preparation exercises. Students are encouraged, but not required, to take the AP Exam. AP Language fulfills both a writing and a literature requirement. Summer work required

# AP Literature & Composition A1, A2, A3, S1, S2, C2

1 cr

*12* 

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, though not required, to take the AP Exam. AP Literature fulfills both a writing and a reading requirement. **Summer work required** 

#### ENGLISH ELECTIVE COURSE OFFERINGS

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

Literature-based electives will run every other year. In 2019-2020, The Short Story, Science Fiction and Women's Literature will be offered. In 2020-2021, World Literature, Shakespeare and Myth and Folklore will be offered.

AP Literature & Composition (Full-year class for seniors; counts as both a writing and literature-based elective)

#### **Writing-Based Electives**

Journalism Creative Writing Public Speaking Technical Writing

#### **Literature-Based Electives**

The Short Story Science Fiction Women's Literature

#### WRITING-BASED ELECTIVES

.5 cr

Creative Writing

A1, A2, A3, S1, S2, C2

11, 12

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.

.5 cr

11, 12

A1, A2, A3, S1, S2, C2

Professional writing is the act of communicating in professional fields and "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 professional writing often requires a different style, format, and vocabulary than that with which students are more familiar. In a sense, professional 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 professional. 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 professionals in various fields.

Journalism .5 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. 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. 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** A1, A2, A3, S1, S2, C2

.5 cr

11, 12

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 .5 cr (not offered in 2019-2020) 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.

Women's Literature .5 cr 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 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.

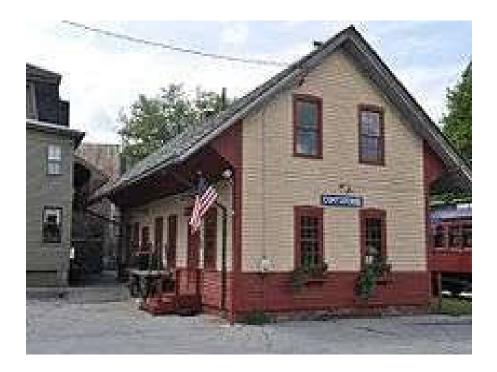
Science Fiction .5 cr 11, 12
A1, A2, A4, S, C1

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 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 .5 cr 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 .5 cr (not offered in 2019-2020) 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!

.5 cr

9, 10, 11, 12

A1, A3, S1, S2, S3, C1

This is an introductory course to food and food preparation. Lab work reinforces the preparation skills and nutrition concepts. In addition to baking techniques, this course emphasizes the basic principles of food safety, food preparation, and nutrition.

P Foods 2: Culinary Arts 9,10, 11, 12

.5 cr

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 Textile Arts

.5 cr

9, 10, 11, 12

A1, A3, S1, S2,S3,C1

Explore the ways fiber, fabric, texture, pattern and color influence design skills to produce, alter, and/or recycle fabric and fashion to create unique, one-of-a-kind textile arts. \*This course runs every other year. It will next run in 2020-2021.

P On My Own

.5 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 AND MUSIC

ART

## F Drawing and Painting 1 .5 cr A1, A2, A3, S1, S2, S3, C1, C2, C3

9, 10, 11, 12

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

.5cr

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 .5 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 .5 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. \*This course runs every other year. It will next run in 2020-2021.

#### 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 .5 cr

9, 10, 11, 12

## A1, A2, A3, S1, S2, S3, C1, C2, C3 Prerequisite: ICT Portfolio, Foundations of Technology, 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 meets the ICT "additional course" requirement.

## F Photography

.5 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 is encouraged, but not required, to-supply his or her own 35-mm film camera.

## F Advanced Art .5 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 Music Theory & Music Technology

.5 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 Steel Band

.5 cr

9,10, 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. 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. Preference will be given to upperclassmen.

F Jazz Band

.5 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 Concert Band

.5 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.

#### A1, A2, A3, A4

All levels of ability are welcome in this class as it will be differentiated to address each student's guitar proficiency. Whether it is reading notes and beginning chords or building a repertoire of songs, students will be challenged at their own levels. Guitars are not provided. (Special circumstances may allow some who do not have guitars to borrow from the school.) \*This course runs every other year. It will next run in 2020-2021.

## F High School Chorus .5 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.



## **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, school 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-Alge-

#### bra with current teacher recommendation

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 and math teacher recommendation 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, 11, 12

A2, A3, S1, C2 Prerequisite: Successful completion of Algebra 1 or Algebra 1B

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) equations and inequalities; (2) linear relations and functions; (3) systems of equations and inequalities; (4) quadratic functions and relations; (5) polynomials; (6) radical functions; (7) exponential and logarithmic functions; (8) rational functions. Conic sections will be discussed when time permits. Throughout this course, students will develop learning strategies, critical thinking skills, and problem solving techniques to prepare for future math courses. An **honors section** is available by teacher recommendation. A **co-taught section** is available by teacher recommendation and is intended for students who have experienced the Algebra 1A and Algebra 1B course.

Geometry .5 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. (This is a required course to qualify for NH Scholars)

Advanced Algebra 1 cr 10, 11, 12 A2, A3, S1, C2 Prerequisite: 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.

A2, A3, S1, C2

Prerequisite: Advanced Algebra or Honors Alg 2, or

Alg 2 with a 90 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.

## Introduction to Statistics

.5 cr

10, 11, 12

A2, A3, S1, C2

Prerequisite: Algebra 1

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 AP Statistics. 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, or a 90 or better in Advanced Algebra

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. 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. It will look at the derivatives and integrals of functions represented in three ways: a formula, a graph, and a table of values. Completion of summer work as assigned by the calculus teacher is required.

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. Completion of summer work as assigned by the calculus teacher is required.

Senior Math 1 cr 12

A2, A3, S1, C2 Current teacher recommendation needed

This course is intended for graduating seniors who want to prepare for college and life beyond high school. The course is broken up into two major areas of study. One component is intended to prepare a student for the Accuplacer test; the other is to develop the students' personal finance skills. The personal finance component has a primary objective of providing students with basic financial tools and knowledge that will enable them to build the lives they envision. It also provides an understanding and an awareness of the factors that can influence decisions, introduce basic methodologies, and provide structured practice in analyzing a problem, identifying options, and making a decision.

## **WORLD LANGUAGES**

For continuation to the subsequent level in any world language class, students must have met the competencies of the previous level. Students new to the Hopkinton School District will be placed based on prior student language experience. 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 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. \*This course runs every other year. It will next be offered in 2020-2021.

French 2 1 cr 9, 10, 11, 12

Prerequisite: French 1

Prerequisite: French 2

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

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 web-based 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* 

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.

11, 12 French 4 1 cr

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

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, web-based resources, 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.

French 5 1 cr 12

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

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 web-based 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.

9, 10, 11, 12 German 2 1 cr Prerequisite: German 1

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

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.

Prerequisite: French 3

Prerequisite: French 4

Prerequisite: German 2

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

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 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.

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 10, 11, 12 1 cr

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

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 11, 12 1 cr

*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 immersion experience may be offered at this level.

9, 10, 11, 12

Prerequisite: Spanish 2

# PHYSICAL EDUCATION & HEALTH

Health • .5 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 - .5 cr 9, 10
A1, S1, 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 Lifetime Activities* **→** .5 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, and strength training. The students will not only learn valuable skills that will allow them to enjoy these activities, but will also gain a better understanding of how each activity can help them socially once they leave high school.

Personal Fitness .5 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 weight control, muscular endurance, strength, flexibility, and fitness management.

Single Gender PE (Female)	.5 cr	10, 11, 12
Single Gender PE (Male)	.5 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 .5 cr 11, 12 A1, A2, S1, S2, S3, C1, C2

This physical education course is open to students who enjoy the outdoors, enjoy challenging themselves, and are willing to work with other students. This course is designed to give students an opportunity for personal development. Students will develop a greater understanding of intrapersonal effectiveness and environmental awareness. These include understanding and celebrating group diversity, being sensitive to others by encouraging open and honest communication, and building cooperative relationships around common projects. Pushing personal limits through various class activities including challenge course (both high and low rope elements), hiking, geocashing, rock climbing, snowshoeing and ice fishing all help to achieve these goals.



# PROJECT LEAD THE WAY

Project Lead the Way is designed to help students explore technology related careers and 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. Class activities focus on problem-solving, requiring students to work in teams to generate solutions. Students have the option to earn college credit, if they earn a C or better, 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 the newest technology? The Introduction to Engineering Design<sup>TM</sup> 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<sup>TM</sup> 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. Courses are offered free for college credit for juniors and seniors and for a nominal fee for freshmen and sophomores.

### ICT, P Principles of Engineering(POE)

1 cr

10, 11, 12

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

Prereq.: Intro to Eng. Design or instructor 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. Courses are offered free for college credit for

juniors and seniors and for a nominal fee for freshmen and sophomores.

ICT, P Digital Electronics

1 cr

Prerequisite: Intro to Eng. Design or instructor permission

10, 11, 12

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

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 of electronics. Digital electronics is the foundation of all modern electronic

devices. Not offered in 2019-2020.

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.

### ICT, P Aerospace Engineering

1 cr

10, 11, 12

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

Prerequisite: 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 solution 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.

### 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 or RIT)

### 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: Intro to Eng. Design & Principles of Eng. or 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.\*This course runs every other year. It will next run in 2020-2021.



# 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* → .5 *cr Required:11 A1, A3, S1, C1, C2, C3* 

In this class, offered through our School Counseling 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, students will be required to complete two 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 .25 - 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 A1, A2, A3, S1, S2, C1, C2*

.5 cr

11, 12

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. The site mentor and the career counselor will monitor the exploring teaching interns. All interns will follow the same R2P2 (Research, Reflection, Product and Presenta-

#### Peer-to-Peer Internships

.25 - .5cr

9, 10, 11, 12

#### A1, A2, A3, S1, C1, C2

tion) model.

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**

Graduation requirements for science are 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 soils, plate tectonics, earth's atmosphere, water, ecosystems and evolution. Honors sections have additional, higher level objectives for each unit of study and/or additional units. Additionally, honors sections include more fundamental chemistry and more mathematics.

Biology Transfer Required: 10

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

Biology is the study of living systems. Building from the Earth Systems approach of grade 9, Biology focuses more on living things. Biology starts where Earth Systems Science ended, with a big picture look at ecosystems. We then begin looking at individual organisms emphasizing the structure and function of plant organs and tissues. Students will then undergo a detailed study of cells and then the biochemical systems of living things. The second half of the year focuses on genetics and evolutionary change. How is one generation connected to the past and future generations? What is DNA and what does it do? What can scientists do with DNA now that they can, and should they? How is the evolution of ecosystems and of species tied together? Since Biology is primarily for early high school students, we will continue to focus on not only scientific processes but on the general study skills necessary for successful science students in high school and in college. **Honors sections have additional, higher level objectives for each unit of study and/or additional units. Additionally, honors sections include more fundamental chemistry and more mathematics.** 

### Chemistry 1 cr 10, 11, 12 A1, A2, A3, S1, S2, S3, C1, C2, C3 Prereq: Algebra 2 (can be taken concurrently) or 2B (completed)

Chemistry is the study of the composition, structure, and properties of substances and the changes they undergo. This course will prepare students who plan to pursue 2- or 4- year college degrees, including those in a science field, including nursing. It is designed for students who also plan to take a full year physics course in high school. Chemistry content will be mastered by lecture, demonstration, and laboratory exploration. The course will use mathematics to explain and understand much of the scientific phenomena encountered. Major topics include: chemical and physical changes, atomic structure and the periodic table, chemical bonding, types of chemical reactions, and chemical calculations. The course is designed to develop conceptual understanding of the fundamental ideas of chemistry. This course is new to Hopkinton High School starting in 2019/20 and is being offered as a pilot.

Chemistry for Physical Scientists 1 cr 10, 11, 12 A1, A2, A3, S1, S2, S3, C1, C2, C3 Prereq: Algebra 2 or permission (We anticipate that, to be successful, students will have earned a 90%+ in the previous regular level science course or 85%+ in the previous honors level science course)

Chemistry for Physical Scientists is a high school level course designed for students who plan to pursue college majors in chemistry, physics, or engineering. The course would also be appropriate for potential pre-med or pre-vet students, or for anyone who wants the intellectual challenge of a course that is highly content dense. The first 3 quarters will consist of the same units that the regular college preparatory chemistry course does in a whole school year, with additional content in each unit. The 4th quarter will consist of introductory units on nuclear chemistry, organic chemistry, and equilibrium and kinetics. The course is designed for students also planning to take a full year physics course in high school. This course is new to Hopkinton High School starting in 2019/20 and is being offered as a pilot.

Introduction to Chemistry and Physics 1 cr 11, 12 A1, A2, A3, S1, S2, S3, C1, C2, C3 Prerequisite: Earth Systems Science, Algebra 1B (may be taken concurrently with permission)

Introduction to Chemistry and Physics provides a creative, hands-on overview of chemistry and physics. Students will learn the fundamentals of chemistry and physics in 1 year rather than taking 2 full year courses with more in-depth content. Chemical and physical concepts will be explored through a variety of high interest laboratory activities. The course will conclude with an introduction to astronomy. Most principles of this course will also be addressed in full year chemistry and full year physics, but there will be much less emphasis on mathematics and more emphasis on laboratory skills. This course will prepare students wishing to pursue an associate's or bachelor's degree in a college non-science major. It will also prepare students for high school Chemistry or Physics.

AP Chemistry

1 cr
11, 12

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

Prerequisites: Alg. 2 and full year chemistry

(Students who have been successful in the past have had pre-calculus and a B or better in full year chemistry)

AP Chemistry covers some of the same topics taught in first year chemistry, but in greater depth and with greater use of mathematics. It also covers topics not taught in the regular chemistry course, such as Kinetics, Electrochemistry and Acid-Base & Solubility Equilibrium.. 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.

Physics 1 cr 10, 11, 12
A1, A2, A3, S1, S2, S3, C1, C2, C3 Prerequisite: Algebra 2 (may be taken concurrently), or 2B completed.

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.

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.

*AP Physics Electromagnetics* 1 cr *A1*, *A2*, *A3*, *S1*, *S2*, *S3*, *C1*, *C2*, *C3* 

11, 12

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. This course has been taken as an independent study. (Not offered in 2019-2020)

# 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 studenets 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 free college credits through the New Hampshire Technical Institute if they earn a C or better.

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

Throughout this junior/senior level course, students will explore core ecological principles and theory while also spending extensive time in the field applying these concepts. The course will also investigate local and global environmental issues relating to both natural and human disturbance. Major topics will include ecosystem ecology, population ecology, behavioral ecology, disturbance ecology, wildlife ecology and management, climatology, and oceanography. This is the only science elective that includes a focus on earth sciences. This course is available for honors credit through an honors contract. Students must commit to this path at the beginning of the course. This course is part of the Project Running Start Program. Students may earn three or four college credits through the New Hampshire Technical Institute if they earn a grade of C or better.

Biology 2\* 11, 12 1 cr Prerequisites: Biology and Chemistry

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

This honors level course is designed to be a hybrid between AP Biology, AP Environmental Science and AP Anatomy and Physiology. Major topics included in the course are field biology, community and evolutionary ecology, cellular biochemistry, molecular genetics, and anatomy and physiology. Students will do extensive inquiry-based lab field 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 if they earn a grade of C or better.

# SOCIAL STUDIES

The Social Studies Department offers a wide variety of courses in three main areas: history, social science, and geography. In order to graduate, students must earn .5 credit in global studies, .5 credit in economics, .5 credit in civics, .5 credit in an elective, and 1 credit in American History. All freshmen take a World Cultures course during fall semester and Early American History in the spring term. Starting in 10th grade, students can choose from a wide variety of courses, and the vast majority of students take at least one credit of social studies each year as sophomores. Juniors must take a one-semester economics course and all seniors take civics, which is also a semester class. Most students supplement those classes with either semester-length electives or year-long Advanced Placement (AP) courses.

World Cultures • .5 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**. **Summer work required.** This course satisfies the .5 credit NH state graduation requirement in global studies.

Early American History • .5 cr 9 (Spring)

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 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 every-day 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. Summer work required.** 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 two-course introductory college-level sequence in American history from pre-Columbian times through the present. The course is most appropriate for students with strong academic skills who are highly motivated because it includes more topics, proceeds at a faster pace, and requires students to understand the material at a deeper level than other American history courses. Activities that require higher order thinking such as analyzing primary source documents and writing persuasive essays are central to the course. The course also emphasizes preparation for the College Board's AP US History exam in May. Summer work required *This course satisfies the 1-credit NH state graduation requirement in US History.* \* With instructor approval

Global Issues .5 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 .5 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 .5 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.

### Military History .5 cr 10, 11, 12

*A1, A3* 

This one-semester elective history course uses selected topics related to warefare to address state and national learning standards. Units of study may include ancient and medieval eras as well as the World Wars and more recent conflicts. The study of military conflicts will include large issues such as causes and strategy as well as more detailed aspects like individual battles, tactics, and weapons.

### Introduction to Law .5 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, civil, law while placing an emphasis on tort categories and defenses. Students will 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.

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 such as socialization, discrimination, conformity, and life stages.

Psychology .5 cr 10, 11, 12

A1, A2, A3, S1, C2

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

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. **Summer work required.** 

*Economics* **→** .5 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 .5 credit NH state graduation requirement in economics.* Honors section available.

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 goals of the course include 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 prepares students for the College Board's AP exam and thus includes intensive reading and writing. Summer work is required. **Summer work required.** 

\* With instructor approval.

Civics 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 .5 credit NH state graduation requirement in Civics & Governments*.

## TECHNICAL EDUCATION

P Wood Technology

.5cr

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 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

.5 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

.5 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 on 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, goblet and jewelry creation, 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 qualifying for 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.

### Foundations of Learning

.25 cr

9, 10

Prerequisite: Case Manager approval

This semester-long course is designed to provide instruction expectations 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. Students will self-report their daily progress.



### ADDITIONAL CREDIT OPPORTUNITIES

### **Extended Learning Opportunities**

.25 - 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
- Most 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 school 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.

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.
- With student collaboration, a faculty member plans, supervises, and evaluates the course-work which the student will produce.
- Proposal deadline is the second Friday of Semester 1. Deadline for Semester 2 precedes Semester 1 exams.
- Contracts, available through a school counselor, must be completed and approved by administration before the student may start the independent study.

*Peer Instruction* .25 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 is graded on a pass/fail basis. Forms are available in the counseling office. Consultation with school counselor is **required** prior to form availability. This elective is not recommended as an eighth class, leaving no opportunity for study hall.

#### *Driver Education* .25 cr 9, 10, 11, 12

Prerequisite: Student must be 15yrs and 9 months by the first 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 \$600 and must be paid by the student. The course is offered fall, spring and once in the summer. This course is only available Pass/Fail. To register for this course go to: www.jacksdrivingschool.net

### VLACS courses (Virtual Learning Academy) .5 - 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 the school counselor, a parent, and an administrator. A VLACS form must be completed, available through the counseling office. Exceptions may be granted 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 he school counselor 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.)

### PE 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 apply to 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 Communica-	Graphic Arts & Digital Communica-
tions I	tions II
Health Science & Technology I	Health Science & Technology II
Teacher Preparation I	Teacher Preparation II
Criminal Justice: Criminology	Criminal Justice: Criminal Law
Fire Science: Firefighter I	Fire Science: EMT
Information Technology: Programming	Information Technology: Computer Repair
& Robotics	& 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 needed 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 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 .5 credit in fine arts
- 2 yrs. Health Occupations satisfies 1 credit in science and .5 credit in health
- 2 yrs. Information Technologies (ICT) satisfies ICT credit

Students earn two credits per year for successfully completing a CRTC program, for a total of four 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.

#### 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. Students must get permission from a school counselor and principal to take appropriate courses for a \$150.00 fee. Some eStart STEM courses qualify under the "State STEM Scholarship" for reimbursement to juniors and seniors for the fee if they receive a grade of C or better. A maximum of two courses may count 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)

