

Deering High School

Course Catalog

2024-2025

Learning Without Borders

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Dear Deering High School Student:

This Course Catalog has been prepared to assist you and your parents or guardians with the process of course selection for the 2024-2025 school year.

The Catalog contains information regarding goal setting, graduation requirements, and course descriptions. Deering High School's block schedule makes a wide variety of course offerings available to our students.

These options necessitate choices and decisions. We encourage you to seek the experience and advice of your parents/guardians, your school counselor, and your teachers before finalizing your course selections.

In addition to planning for the 2024-2025 school year, we want to work closely with you to ensure that your choices will help you meet your goals for the future. This includes meeting graduation requirements as well as requirements for post-secondary education options that you are pursuing.

We hope the information provided will encourage thought and discussion. If you or your parents/guardians have any questions, contact - school counselors, teachers, or administrators - to arrange a conference.

Sincerely,

Dr. Jake Giessman
Deering High School Principal

Statement of Purpose for Deering High School

“THE MISSION OF DEERING HIGH SCHOOL IS TO GRADUATE STUDENTS WHO ARE COLLEGE AND CAREER READY AND GLOBALLY COMPETENT.”

Selecting Courses to Achieve Your Goals

Thoughtful planning will help you achieve the goals you have for high school and your future. Take time to read through the information in this guide to make sure you are familiar with everything from minimum graduation requirements to the wide variety of elective courses available to you. Below are several suggestions to assist you in making these important decisions.

Challenge yourself. Use high school as an opportunity to discover how much you are capable of accomplishing.

Consider the grades you have earned in the past. Some courses build upon the knowledge or skills you have acquired in previous work (prerequisites), while other courses build upon knowledge in related subjects. For example, Physics requires math proficiency and Chemistry requires the prerequisites of Environmental Science and Biology.

Consider the things that interest you and take courses that will help you increase your knowledge in your area of interest.

Discuss possible courses with your parents, teachers, school counselor, advisor, and peers.

Be certain that you select courses to meet the DHS high school graduation requirements, as well as courses that support and develop your individual interests and postsecondary goals.

Remember, the more planning and thought you give to course selection, the more meaningful your high school experience will be.

Although Deering High School makes every effort to meet your course requests, certain course configurations are not always possible. The counselors in the School Counseling Department are available to assist students with exploring course options. School counselors can work with students to map out four-year plans and assist students in making decisions around selecting courses to meet particular goals. Students are welcome to drop in to the School Counseling Office or make an appointment to meet with their counselor.

The high school counselors are:

Ms. Asia Alexis

Ms. Leah Dixon

Mr. Shawn Kennedy

Ms. Aley Watts

Ms. Laurie Medeiros

Equal Opportunity

The Portland Public Schools ensure equal educational opportunities regardless of race, color, creed, national origin, handicap, religion, gender, or sexual orientation in accordance with state and federal guidelines.

Graduation Requirements

In order to earn a diploma, students will need to show proficiency on a set of Graduation Standards. These standards will be the same, no matter which Portland Public Schools high school the student attends.

The Portland School Committee has established that each student must earn a total of forty-one (41) credits/twenty-one (21) Units of Proficiency (UPS) and meet a computer proficiency standard to participate in graduation exercises and receive a high school diploma. The 41 credits are typically earned over a four year period, barring extenuating circumstances such as serious illness or academic failure. The computer proficiency standard is typically met by the end of middle school. All course credits and requirements must be completed in order for a student to participate in graduation exercises.

Students will need to earn 41 credits/21 Units of Proficiency (UPS) in order to graduate. In order to earn a credit/UP in a class or alternative pathway, students must earn a grade of at least a 70 (on a 50-100 scale).

Students are expected to select their courses in consultation with their parents/guardians, teachers, and school counselors. Credits are awarded upon successful completion of a course. Typically, full-term (one semester) courses at Deering High School are worth two credits each; half-term (one quarter) courses earn one credit each. Within this guide, each academic cluster has defined the courses recommended to meet the following graduation requirements:

4 courses of English	8 credits (4 units of proficiency)
3 courses of Mathematics	6 credit (3 units of proficiency)
3 courses of Science	6 credit (3 units of proficiency)
3 courses of Social Studies	6 credit (3 units of proficiency)
1 course of Visual/Performing Arts	2 credits (1 unit of proficiency)
1 course of Physical Education	2 credits (1 unit of proficiency)
1 course of Health	1 credit (1 unit of proficiency)
Elective Courses	10 credits (5 units of proficiency)
Senior Capstone	Counts as 1 of the 10 electives
Total for graduation	41 credits (21 units of proficiency)

Note: The requirements to graduate from Deering High School are not always the same requirement that college admissions offices will ask for. For example, it is highly recommended that students planning to attend college should complete at least two courses of World Languages through Level II and many selective colleges want students to have a full schedule of courses which includes a course from each core subject every year.

University of Maine's High School Recommendations

The University of Maine, and most colleges offering Bachelor's degrees, expect the following course program to be completed during high school in order for students to be college ready. In addition to these core courses, students also need to choose a variety of elective courses to develop interests and a broad knowledge base. High school coursework should be at the college preparation level or higher. Advanced, honors, or AP coursework is encouraged.

The following core courses are recommended by the University of Maine system:

- 4 courses of English
- 4 courses of Math including Algebra I, Algebra II, Geometry and a senior year math course
- 3 courses of Social Science
- 3 courses of Lab Science
- At least through level II in a language other than English
- Computer science and technology courses are strongly recommended

Reminders for Course Selections

- Except in special cases, students are expected to take a full schedule of 8 courses per year.
- Credit cannot be granted twice for the same course. Courses in the music program and JMG are exceptions to this rule.
- To select and remain enrolled in a course, students must meet prerequisites, which may include teacher recommendation.
- All students are encouraged to pursue rigorous courses. A number of tools are used to identify students for honors and AP courses including parent and teacher recommendations and students' own requests.
- Students with learning differences and disabilities should discuss and plan their course selections with their case-manager who is responsible for implementing the student's Individualized Education Plan (I.E.P).
- Multilingual students should discuss and plan their course selections with their English teachers and school counselors.

Fine Arts Requirements

Courses counting for fine arts credit are marked by the letters FA following the course title in this Course Selection Guide.

Course Descriptions

English Language Arts Department

The Deering English curriculum is a continuum that satisfies our need for a sense of meaning and a sense of common human experience. Through the study of classic, contemporary, and global works, we explore and honor those universal and shared truths that transcend time and culture as well as those specific, unique, and intriguing truths that provide insights into an unfamiliar world. In this search for others, we reflect on our cultural, spiritual, and ethical selves so we may be productive and moral citizens of the twenty-first century. Through the study of the thinking-speaking-listening and writing process, we sharpen our critical thinking skills to clarify hazy thoughts, understand how language moves and manipulates us, and communicate effectively and responsibly. The result is a classroom dialogue of mutual understanding and trust.

In order to graduate from Deering High School, all students are required to complete eight credits through four core English offerings. Students are urged to extend their language abilities by selecting elective English classes, such as Drama and Speech, Creative Writing, or Documentary Studies. AP students are expected to complete an additional summer reading assignment as outlined on the Deering High School website and complete and submit an assignment on the first day back to school in September.

English -- Core Courses

Course Title: English 1
Course Number: 1112
Credit: 2 English credits
Open to: Grade 9
Description: This course explores the various literary genres (novel, play, short story, poetry, and essay) with an emphasis on how writers use literary devices to convey theme. Students write both analytical and personal essays in relation to the literature studied. They also learn to identify rhetorical strategies in professional models and begin to use those strategies in their own writing and discussions.
Honors weight/status: Students who earn an overall grade of at least a 3.25 (93) **AND** earn at least a 3.0 (90) on **ALL** of their standards **AND** complete required honors challenges will receive honors weight and designation on their transcript.

Course Title: English 2
Course Number: 1122
Prerequisite: Passing grade in English 1
Credit: 2 English credits
Description: Designed for most sophomore students, this course examines how individuals maintain their integrity in the face of injustice through the various literary genres (play, short story, poetry, memoir, and essay). A sequential approach to narrative, expository, research and creative writing as well as grammar and mechanics leads to polished multi-paragraph pieces.

Course Title: Pre-AP English 2
Course Number: 1135

Prerequisite: Successful completion of English 1
Credit: 2 Honors English credits
Open to: Grade 10
Description: In Pre-AP English 2, students become aware of how poets, playwrights, novelists, and writers of nonfiction manipulate language to serve their purposes. As writers, students compose more nuanced analytical essays while never losing sight of craft and cohesion. Students will be required to take multiple College Board reading assessments in addition to responding to teacher-created writing prompts. Engaging in the Pre-AP curriculum will help students prioritize and strengthen key skills to prepare for AP-level English courses; however, it is not a prerequisite for taking future AP-level courses.

Course Title: English 3
Course Number: 1132
Prerequisite: Passing grade in English 2
Credit: 2 English credits
Description: This course surveys major American writers with an emphasis on well-written essays of literary analysis. Students will further develop their grammar and mechanics skills and will develop their creative voice through narrative writing. Through research and discussion, students examine the ideal and reality of the American dream as represented in the literature.
Honors weight/status: Students who earn an overall grade of at least a 3.25 (93) **AND** earn at least a 3.0 (90) on **ALL** of their standards **AND** complete required honors challenges will receive honors weight and designation on their transcript.

Course Title: English 4
Course Number: 1142
Prerequisite: Passing grade in English 3
Credit: 2 English credits
Description: This course surveys major world writers from Shakespeare to more contemporary authors with an emphasis on well-written essays of literary analysis. Students will further develop their grammar and mechanics skills and will develop their creative voice through narrative writing. Through research and discussion, students examine how our geographic, historical, and cultural context influence our experience and perspective of the world with an emphasis on the issues that inspire and plague our common human experience. Students will be reading texts as a class, and students will choose from a variety of authors from around the world to read in book groups.
Honors weight/status: Students who earn an overall grade of at least a 3.25 (93) **AND** earn at least a 3.0 (90) on **ALL** of their standards **AND** complete required honors challenges will receive honors weight and designation on their transcript.

Course Title: Advanced Placement Language and Composition
Course Number: 1130
Prerequisite: Successful completion of English 1 and English 2, preferably Honors or Pre-AP
Credit: 2 English credits
Open to: Grades 11 and 12; Preference given to those in Grade 11; Enrollment may be limited.
Description: This college-level Advanced Placement English course requires that students read and carefully analyze a broad and challenging range of non-fiction prose selections written in a

variety of periods, disciplines, and rhetorical contexts. Through close reading and frequent writing, students will deepen their knowledge of rhetoric and how language works, while strengthening their own composing abilities. Instruction emphasizes analytical annotation, accurate writing in response to a prompt, research and documentation skills, and sustained in-depth instruction in writing expository, analytical, personal, and argumentative texts. The writing-workshop format demands full participation by each student. Students will read texts at the 1,300 lexile and above.

Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Course Title: Advanced Placement English Literature and Composition
Course Number: 1140
Prerequisite: Willingness and ability to meet AP standards and successful completion of the AP summer reading assignment due in September.
Credit: 2 English credits
Open to: Grades 11 and 12; Preference given to those in Grade 12; Enrollment may be limited.
Description: In this course, students will have lengthy and intellectually demanding readings and numerous long-term writing and project assignments. AP English Literature and Composition is an intensive exploration into complex and challenging masterworks of English and world writers, similar to those taken in college. The heart of the program is close textual analysis, the development of critical writing skills and an examination of various literary concepts with special emphasis on tone and style. Students will be reading books at the 1,300 lexile and above.

Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

English -- Elective Courses

Course Title: Creative Writing
Course Number: 1115
Prerequisite: None
Credit: 2 Elective credits
Open to: All grades
Description: Designed for students interested in developing their voice using the writing process of drafting, offering and receiving feedback in reading-writing groups, revising, sharing and publishing in school, local and national publications. Special attention is given to the importance of word choice and sentence variety. Units emphasized are memoirs, personal journals, reading contracts, short stories and narrative and lyric poetry. Preparation and presentation of a writing portfolio is the final exam.

Course Title: Drama and Speech
Course Number: 1125
Prerequisite: None
Credit: 2 Fine Arts credits
Open to: All Grades
Description: This class is an introduction to stage movement, voice, diction and pantomime. Students will practice techniques to overcome stage fright and develop self-confidence. The class concentrates on improvisational techniques and acting skills for in-class performances. Scene study and performance will include: monologues, scene partner work, and oral interpretation of literature. Performance material will be both student written and drawn from the work of established playwrights. Students will learn and design basic directing, costume design, set design and stage make-up skills. In the speech component, the students will be exposed to various speech experiences and will be evaluated according to content, organization, and delivery of material. The course will also help the student to develop critical and analytical skills through experience in critiquing speeches of others. In the speech component, the students will be exposed to various speech experiences and will be evaluated according to content, organization, and delivery of material. The course will also help students develop critical and analytical skills through experience in critiquing speeches of others.

Course Title: Social Justice
Course Number: 1007
Prerequisite: None
Credit: 2 Elective Credits
Open to: All Grades
Description: Building on the examination of social justice issues studied in English 2, this course will engage students with issues such as race, gender, class and intersectionality via written text, videos, and other media. Students generate discussion norms, as creating a safe place for productive discussion is crucial. Students pick either a current or fairly recent injustice as an inquiry research project. Guest speakers, an ongoing element of the class, share their experiences taking action. The second half of the semester is based on taking action.

Course Title: Documentary Film Studies
Course Number: 1150
Prerequisite: English 1
Credit: 2 Fine Arts Credits
Open to: Grades 10, 11 and 12
Description: In this class we will watch, critique, and collaborate to create our own documentary film products. We will focus on famous (and infamous) examples from throughout the documentary genre, paying particularly close attention to the tricks of the trade. We will investigate how directors insert themselves and their own biases in their products, whether directly or through more subtle means. The summative product will be a short documentary film that you will shoot, edit, and present over the course of the second quarter.

Course Title: Writing for Success
Course Number: 1119

Prerequisite:	None
Credit:	2 Elective Credits
Open to:	All Grades
Description:	This course is designed for students of all grades who want to improve their writing. It offers intensive instruction in sentence skills, grammar, and writing conventions. The course seeks to familiarize students with “best practices” for approaching different sorts of writing, such as formal emails, informational, analytical, persuasive, research, and narrative writing. The course includes some review of basic writing concepts, the grammatical concepts most commonly tested, as well as vocabulary review and strategies for pre-writing, editing and revision. In addition, the course will bolster skills in the entire writing process, including time management and minimization of anxiety.

Mathematics Department

An understanding of mathematics is crucial for future success in college and job opportunities. Deering High School offers a wide range of mathematics courses at several levels. The Common Core State Standards, standards of the National Council of Teachers of Mathematics, and English language learners Learning Results have been utilized to adapt our curriculum to the needs of all students.

Students are required to earn six math credits for graduation and demonstrate mastery of the Common Core State Standards, currently measured by the NWEA. Since the study of mathematics is sequential, we encourage students to enroll in two math courses per year, and recommend four math classes total to meet most college admission requirements. Students may be required to take an entrance exam for some courses and complete summer work.

Standards for Accelerated and Honors Courses in Mathematics

1. Student shows evidence of outstanding math skills and ability which could include standardized test data.
2. Student shows evidence of self-motivation, i.e., work is completed on time, work is consistently of high quality, is willing to go beyond the basic requirements of a course, and willingness to work with others.
3. Student shows evidence of well developed higher order thinking and problem-solving capabilities.

Core Courses Available to Freshmen

Freshman placement is dependent upon 8th grade student performance, including the meeting of exceeds standards and 8th grade teacher recommendation.

Algebra 1 Year-long	2 semesters	4 math credits
Accelerated Math I	1 semester	2 math credits

Core Courses Available to Upperclassmen and 2nd Semester Freshman

These courses are open to upperclassmen based upon successful completion of Algebra I or Accelerated Math I; courses are one semester.

Algebra II

College Prep (Semester)
Honors (Semester)

Geometry

College Prep (Semester)
Honors (Semester)
Accelerated Math 2 (Semester)

Deering High School Math Course Sequence

Sequence 1	Algebra 1 Year-long*	Geometry CP or Honors	Algebra 2 CP or Honors
Sequence 2	Accelerated Math 1	Accelerated Math 2	Accelerated PreCalculus
Electives	PreCalculus Honors AP Calculus AP Statistics & Probability		
Dual Enrollment**	Quantitative Reasoning (SMCC) Calc A (USM)		

**Algebra 1 Year-long offers student honors level work for those interested in pursuing honors credit.*

***Students who successfully complete and meet the requirements will earn college credit at SMCC for Quantitative Reasoning and USM for Calc A*

Math -- Core Courses

Course Title: Algebra I
 Course Number: 1412
 Prerequisite: 8th Grade Math
 Credit: 4 Mathematics credits
 Open to: Grade 9
 Description: Students begin the course with one-variable statistics, building on ideas from middle school. Starting with data collection and analysis sets a tone for the course of understanding quantities in context. From there, students move on to expand their understanding of linear equations, inequalities, and systems of linear equations and inequalities. They use these representations to model relationships and constraints but also reason with them abstractly. Over the next few units, they expand their understanding of functions and deepen their ability to represent, interpret, and communicate about them—using function notation, domain and range, average rate of change, and features of graphs. The course ends with a study of quadratic equations. Students extend their ability to use equations to model relationships and solve problems. They develop their capacity to write, transform, graph, and solve equations—by reasoning, rearranging equations into useful forms, and applying the quadratic formula.

Honors weight/status: Students who earn an overall grade of at least a 3.25 (93) **AND** earn at least a 3.0 (90) on **ALL** of their standards **AND** complete required honors challenges will receive honors weight and designation on their transcript.

Course Title: Algebra Ia
 Course Number: 1412a
 Prerequisite: 8th Grade Math
 Credit: 2 Mathematics credits
 Open to: Grades 9-12
 Description: Students begin the course with one-variable statistics, building on ideas from middle school. Starting with data collection and analysis sets a tone for the course of understanding quantities in context. From there, students move on to expand their understanding of linear

equations, inequalities, and systems of linear equations and inequalities. They use these representations to model relationships and constraints but also reason with them abstractly. Students can select to do an honors option in this course. **Honors weight/status:** Students who earn an overall grade of at least a 3.25 (93) **AND** earn at least a 3.0 (90) on **ALL** of their standards **AND** complete required honors challenges will receive honors weight and designation on their transcript.

Course Title: Algebra Ib
Course Number: 1412b
Prerequisite: Algebra 1a
Credit: 2 Mathematics credits
Open to: Grades 9-12
Description: This is a continuation of 1412a, Algebra 1a where students have the opportunity to expand their understanding of functions and deepen their ability to represent, interpret, and communicate about them—using function notation, domain and range, average rate of change, and features of graphs. The course ends with a study of quadratic equations. Students extend their ability to use equations to model relationships and solve problems. They develop their capacity to write, transform, graph, and solve equations—by reasoning, rearranging equations into useful forms, and applying the quadratic formula. **Honors weight/status:** Students who earn an overall grade of at least a 3.25 (93) **AND** earn at least a 3.0 (90) on **ALL** of their standards **AND** complete required honors challenges will receive honors weight and designation on their transcript.

Course Title: Accelerated Math I
Course Number: 1410
Prerequisite: Recommendation of 8th Grade Teacher
Credit: 2 Mathematics credits
Open to: Grade 9
Description: This course sequence is fast-paced and is designed to be the equivalent of Algebra 1, 2 and Geometry. The course begins with high school geometry standards including: Congruence, Similarity, Right Triangle Trig, Circles and reasoning through proofs. This course is granted honors weight & status.

Course Title: Algebra II
Course Number: 1432
Prerequisite: Passing grade in Algebra I, and/or teacher recommendation.
Credit: 2 Mathematics credits
Open to: All grades
Description: This course prepares students for Advanced Mathematics Concepts or Statistics and Probability. This college preparatory course extends the basic concepts and skills introduced in Algebra I. Topics include equations and inequalities, linear and quadratic functions, systems of equations and inequalities, rational exponents, absolute value equations and inequalities, and the arithmetic of irrational and complex numbers. Students will have the opportunity to solve problems in many real-world contexts using a variety of strategies. Algebra II may be taken concurrently with or before Geometry. The TI-83 Plus graphing calculator is used for instruction. A scientific calculator is required.

Course Title: Algebra II Honors
Course Number: 1431
Prerequisite: Grade of 90 or higher in Algebra I, and/or teacher recommendation.
Credit: 2 Mathematics credits
Open to: All grades
Description: This course prepares students for Geometry Honors and Pre-Calculus Honors, and offers a more advanced study of algebra. Topics include equations and inequalities in two and three variables, rational exponents and functions, absolute value equations and inequalities, sequences and series, the arithmetic of irrational and complex numbers,. Students will have the opportunity to develop and apply a wide variety of complex thinking skills and problem-solving strategies. Algebra II Honors should be taken before Geometry Honors. The TI-83 Plus graphing calculator is used for instruction. A graphing calculator is required.

Course Title: Accelerated Math II
Course Number: 1420
Prerequisite: Grade of A or B in Accelerated Math I and/or teacher recommendation.
Credit: 2 Mathematics credits
Open to: All Grades
Description: This is a continuation of Accelerated Math I beginning with depending student understanding of Algebra and Functions including: Sequences and Functions, Polynomials and Rational Equations, Complex Numbers and Rational Expressions, Exponential Functions and Equations. This course is granted honors weight & status.

Course Title: Geometry
Course Number: 1422
Prerequisite: Passing grade in Algebra I
Credit: 2 Mathematics credits
Open to: All Grades
Description: Geometry is a college-preparatory course in Euclidean Geometry. The course extends the basic concepts and skills introduced in Algebra I. Concepts will include congruence, similarity, Pythagorean Theorem, right triangles and trigonometry, circles, area, volume, coordinate geometry, and an introduction to proof. Students will have the opportunity to solve problems in many real-world contexts using a variety of strategies. A scientific calculator is required.

Course Title: Geometry Honors
Course Number: 1421
Prerequisite: Grade of A or B in Algebra I, and/or teacher recommendation.
Credit: 2 Mathematics credits
Open to: All Grades
Description: This course offers an intensified and advanced study of Euclidean geometry. Concepts will include linear relationships, congruence, similarity, polygons, Pythagorean Theorem, right triangles and trigonometry, circles, area, volume, coordinate geometry, and an introduction to proof. Students will have the opportunity to develop and apply a wide variety of complex thinking skills and problem-solving strategies. Emphasis is also placed on understanding how geometry concepts were developed and justified. A scientific calculator is required.

Math -- Elective Courses

Course Title: ML Pre-Algebra
Course Number: 1403A
Prerequisites: Placement testing, LAC recommendation
Credit: 1 Math, 1 Elective
Open to: All Grades
Description: This course prepares newcomer ML students with review of pre-Algebra concepts and a foundation in the language of mathematics.

Course Title: Quantitative Reasoning (DE)
Course Number: 1435
Prerequisite: Completion of Algebra I, Algebra II and Geometry
Credit: 2 Mathematics credits
Open to: 11th and 12th grade students only
Description: This SMCC dual enrollment course explores connections between mathematics and various facets of modern life. Quantitative reasoning enables both understanding and decision-making about aspects of work, money management, civic participation, and recreation. Topics in this course include unit analysis, percentages, personal finance, statistics, probability, linear and exponential growth, mathematical modeling, and geometry. Students with passing scores on placement exams will earn college credit at SMCC upon the successful completion of the course.

Course Title: Data Science
Course Number: 1434
Prerequisite: Completion of Algebra II
Credit: 2 Mathematics credits
Open to: All Grades
Description: This course will introduce students to the main ideas in data science through tools such as Google Sheets, Python, Data Commons and Tableau. Students will learn to be data explorers in project-based units, through which they will develop their understanding of data analysis, sampling, correlation/causation, bias and uncertainty, probability, modeling with data, making and evaluating data-based arguments, the power of data in society, and more! At the end of the course students will have a portfolio of their data science work to showcase their newly developed abilities.

Course Title: Advanced Placement Statistics
Course Number: 1439
Prerequisite: Completion of Algebra II and a desire to complete a rigorous AP program
Credit: 2 Mathematics credits
Open to: All Grades
Description: The purpose of the AP course in statistics is to 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: Describing patterns and departures from

patterns, Sampling and experimentation: Planning and conducting a study, Anticipating Patterns: Exploring random phenomena using probability and simulation, and Statistical Inference: Estimating population parameters and testing hypotheses. Students will gain proficiency on accuracy and communication of statistical concepts throughout the course, including using appropriate justifications for their results and interpretations. A graphing calculator is required.

Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

This course counts towards the STEM endorsement credit requirement.

Course Title: Accelerated (pre-AP) Pre-Calculus
Course Number: 1430
Prerequisite (1430): Grade of A or B in Accelerated Math I and II OR grade of A in Algebra II Honors and Geometry Honors OR teacher recommendation. All students are required to complete the summer review packet.
Description: Pre-Calculus topics include functions, relations, graphing, logarithms, trigonometry with an emphasis on circular functions, and topics of discrete mathematics. This course is intensive with homework in quantity each night. It also has rigorous demands for learning difficult concepts during long periods of concentration. A “Summer Math Review” reading and assessment are required to demonstrate the understanding of essential knowledge and skills needed for pre-calculus. The TI-83 Plus graphing calculator is used for instruction. A graphing calculator is required.

Course Title: Honors Pre-Calculus
Course Number: 1436
Prerequisite: Successful completion of Accelerated Math I and Accelerated Math II OR grade of 80 or above in Algebra II Honors and Geometry Honors or teacher recommendation. All students are required to complete the summer review packet.
Credit: 2 Mathematics credits
Open to: All grades
Description: Pre-Calculus topics include functions, relations, graphing, logarithms, trigonometry with an emphasis on circular functions, and topics of discrete mathematics. This course is intensive with homework in quantity each night. It also has rigorous demands for learning difficult concepts during long periods of concentration. A “Summer Math Review” reading and assessment are required to demonstrate the understanding of essential knowledge and skills needed for pre-calculus. The TI-83 Plus graphing calculator is used for instruction. A graphing calculator is required.

Course Title: Calculus A (DE)
Course Number: 1450
Prerequisite: Grade of A or B in PreCalculus and teacher recommendation
Credit: 4 USM Credits & 2 Mathematics credits
Open to: All Grades

Description: This is the first course in a three-semester sequence (at USM) covering basic calculus of real variables. Calculus A introduces the concept of limit and applies it to the definition of derivative and integral of a function of one variable. The rules of differentiation and properties of the integral are emphasized, as well as applications of the derivative and integral. This course also includes an introduction to the transcendental functions.
Prerequisite: Pre-Calculus.

This course counts towards the STEM endorsement credit requirement.

Course Title: Advanced Placement Calculus BC

Course Number: 1440 and 1440A

Prerequisite: Grade of A or B in USM Calc A and/or teacher recommendation

Credit: 4 Mathematics credits

Open to: All Grades

Description: Calculus examines differential and integral calculus of elementary functions, and is intensive with homework in quantity each night. It also has a rigorous demand for learning difficult concepts during long periods of concentration. A Summer Math Review assignment and assessment may be required to demonstrate the understanding of essential knowledge and skills needed for calculus. Students are required to be proficient in the use of graphing calculators and purchase a TI-83 Plus (or comparable calculator as defined by the College Board.) The course will require students to understand the construction and application of calculus concepts using the vocabulary and analytical processes required for the AP Exam. Students should expect a fast pace and heavy emphasis on problem solving. The most successful students in this course will have taken 1430 Accelerated Precalculus. AP Calculus BC is taken as a stand-alone course of pure mathematics, and is an excellent preparation for a college-level calculus course. Students will develop preliminary understandings of calculus concepts and will learn how to apply them in a variety of contexts. Students will also synthesize their past mathematics understandings and learn vocabulary that will be useful in a college-level mathematics course. AP Calculus BC teaches all of the topics covered in AP Calculus AB as well as many additional topics. Calculus BC is an extension of Calculus AB rather than an enhancement. As such, Calculus BC will move more rapidly than Calculus AB.

Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

This course counts towards the STEM endorsement credit requirement.

Science Department

Science pervades our society and the rapid pace of scientific change requires all students to develop a higher level of science literacy than ever before. Consistent with the mission of Deering High School, the science curriculum has been designed to enable students to develop their reading, writing, listening and speaking skills as they utilize mathematical and scientific methods to answer questions and solve problems, evaluate data critically for content, source and relevance, and employ technology to gather, organize and communicate information in order to investigate and solve problems. In science classes, students also work toward accepting responsibility for personal decisions and actions and display both local and global awareness of environmental issues.

Potential Options for Science Course Selections:

4-Year College Bound: Science Focus (Example)			4-Year College Bound (Example)		
	<i>Fall</i>	<i>Spring</i>		<i>Fall</i>	<i>Spring</i>
9	-	Environmental Science	9	Environmental Science	Engineering & Design
10	Biology	Anatomy & Physiology	10		Biology
11	Physics	Chemistry Marine Ecology	11	Physics	Chemistry
12	AP Biology AP Chemistry AP Physics	AP Biology	12	Forensic Science	

Portland Public Schools Graduation Requirements (Example)		
	<i>Fall</i>	<i>Spring</i>
9	Environmental Science	
10		Biology
11	Physics or Chemistry	
12		

Standards for Honors Courses in Science

Students selecting honors science courses should exhibit outstanding performance in their previous science classes: an A in college preparatory science classes, or a B or better in honors science classes. Students coming from middle school should have an A in 8th grade science. In the absence of those grade benchmarks, students can also obtain the recommendation of their most recent science teacher. In addition to science skills, teachers will look for strong facility in mathematics, excellent reading and writing skills, well developed higher order thinking and problem-solving capabilities, excellent work habits and a willingness to go beyond basic requirements.

Course Title: Environmental Science

Course Number: 1514

Prerequisite: None

Credit: 2 Science credits

Open to: Grade 9

Description: Environmental Science is an in-depth study of the earth and its place in the universe. Through laboratory activities, students will build a foundation in our earth's systems as seen through the lens of modern environmental challenges. Students will also develop basic skills which provide the foundation for subsequent science courses. **Honors weight/status:** Students who earn an overall grade of at least a 3.25 (93) **AND** complete required honors challenges will receive honors weight and designation on their transcript.

Course Title: Biology Honors
Course Number: 1521
Prerequisite: Completion of Environmental Science, Grade of A or B in Honors Environmental Science 1511 or A in Environmental Science1512, teacher recommendation.
Credit: 2 Science credits
Open to: All Grades
Description: Honors Biology provides students with an in-depth investigation of living things and their relationship to the environment. Topics include molecular and cellular biology, genetics, microbiology, ecology, classification and evolution.

Course Title: Biology
Course Number: 1522
Prerequisite: Completion of Environmental Science
Credit: 2 Science credits
Open to: All Grades
Description: Biology 1522 enables students to investigate living things and their relationship to the environment. Topics include cellular biology, genetics, microbiology, ecology, classification and evolution.

Course Title: ML Biology
Course Number: 1520
Prerequisite: Placement testing, Language Acquisition Committee Recommendation
Credit: 2 Science credits
Open to: All Grades
Description: This course furthers the development of students' reading, writing, speaking and listening skills and strategies needed for social and instructional language acquisitions to support key concepts in Biology, enabling students to investigate living things and their relationship to the environment. Topics include cellular biology, genetics, microbiology, ecology, classification and evolution. Primary sources will be utilized and the focus of the material will be emphasized with language acquisition, building up key vocabulary, and application to everyday life.

Course Title: ML Environmental Science
Course Number: 1523
Prerequisite: Placement testing, Language Acquisition Committee Recommendation
Credit: 2 Science Credits
Open to: All Grades
Description: This course furthers the development of student's reading, writing, speaking and listening skills and strategies needed for the communication of information, ideas and concepts necessary for academic success in the content of science. Students will focus on building academic language and critical thinking skills as well as foundational science standards through the process of scientific inquiry. English language development standards are taught and assessed.

Course Title: Physics Honors
Course Number: 1531

Prerequisite: Environmental Science, minimum math requirements are successful completion of or concurrent enrollment in PreCalculus (HR) (1436) or Accelerated PreCalculus (HR) (1430).
Credit: 2 Science credits
Open to: All grades
Description: Honors Physics investigates, from a mathematical and theoretical point of view, concepts of quantitative analysis of phenomenon, motion, mechanics, energy, astronomy, and magnetism. Students' attainment of concepts taught in this course relies heavily on their ability to use graphing, absolute value, functions, relations, and trigonometry with an emphasis on circular functions. This course is designed to meet the needs of students planning careers in science, engineering or health.

Course Title: Physics
Course Number: 1532
Prerequisite: Algebra I highly recommended, Environmental Science
Credit: 2 Science credits
Open to: All grades
Description: This course emphasizes the concepts of physics with reliance on critical thinking and problem solving activities. Students will continue their study in lab-based sciences and learn and understand the rules that govern the physical world. This course is designed to increase students' physics literacy in quantitative analysis of phenomenon, motion, mechanics, and energy. Students planning careers in science, engineering or health are encouraged to take Honors Physics.

Course Title: Chemistry Honors
Course Number: 1541
Prerequisite: Completion of Environmental Science as well as Algebra II or Algebra II (HR).
Credit: 2 Science credits
Open to: All grades
Description: Honors Chemistry approaches chemistry from a mathematical and theoretical point of view. Topics include the properties and types of matter, stoichiometry, atomic structure, periodicity and bonding. This is a course offered for those students who plan careers in science, engineering, nursing, medicine or allied health careers.

Course Title: Chemistry
Course Number: 1542
Prerequisite: Algebra I, Environmental Science
Credit: 2 Science credits
Open to: All grades
Description: Chemistry introduces students to the basic principles of chemistry as they investigate topics that include properties and types of matter, stoichiometry, atomic structure, periodicity and bonding.

Course Title: Advanced Placement Chemistry
Course Number: 1540
Prerequisite: Grade B or better in Honors Chemistry or A in Chemistry; Honors math courses recommended; teacher recommendation.
Credit: 2 Science credits

Open to: All grades
Description: Advanced Placement Chemistry is designed to be the equivalent of a college introductory chemistry course, and to prepare students for the AP Chemistry exam held each spring. The topics covered are properties of gases, redox, thermochemistry and chemical equilibria. Advanced Placement Chemistry is strongly recommended for students who plan to study chemistry, biology, medicine or engineering.

Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Course Title: Advanced Placement Algebra Based Physics 1
Course Number: 1530
Prerequisite: Grade B or better in Honors Physics or A in Physics; Honors math courses recommended; teacher recommendation.
Credit: 2 Science credits

Open to: All grades
Description: Advanced Placement Algebra Based Physics 1 is designed to be the equivalent of the first half of a college introductory physics course, and to prepare students for the AP Physics 1 exam held each spring. The topics covered are kinematics, energy, momentum, motion, and harmonics. Advanced Placement Physics is strongly recommended for students who plan to study physics, chemistry, biology, medicine or engineering. Advanced Placement Algebra Based Physics 1 is a Fall semester course.

Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Course Title: Advanced Placement Biology
Course Number: 1550 and 1550A
Prerequisite: Biology, Chemistry (at least concurrently), Grade of A or B in Honors Biology or A in Biology 1522; Teacher recommendation
Credit: 4 Science credits (This course will run for the full year)

Open to: Grades 11, 12 (Priority given to seniors)
Description: Advanced Placement Biology is designed to be the equivalent of a college introductory biology course, and to prepare students for the AP Biology exam held each spring. It incorporates the necessary lab and discussion topics required to understand the four “Big Ideas” in the revised AP Bio curriculum.

Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$96.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Course Title: Anatomy & Physiology Honors

Course Number: 1592
Prerequisite: Environmental Science, Biology; Teacher recommendation
Credit: 2 Science credits
Open to: Grades 10-12
Description: Honors Anatomy and Physiology examines the structure and function of the human body. Emphasis is placed upon laboratory investigation of specimens including a mammalian dissection. This course is highly recommended for students planning a career in nursing, medicine or the allied health professions.

Course Title: Marine Ecology
Course Number: 1593
Prerequisite: Earth Science, Biology and concurrent enrollment or previous completion of Chemistry or Physics is preferred.
Credit: 2 Elective credits
Open to: Grades 10-12
Description: Marine Ecology incorporates biological and physical sciences to investigate the Interaction between the living and nonliving components of the Gulf of Maine. Field trips help students apply classroom concepts to actual field work.

Course Title: Forensic Science
Course Number: 1594
Prerequisite: Environmental Science, Biology and concurrent enrollment or previous completion of Chemistry or Physics is preferred.
Credit: 2 Elective credits
Open to: Grades 11 and 12
Description: This course offers a general introduction to the study of forensics. Students will use scientific knowledge and reasoning skills to “solve” crimes. The design of this inquiry-based course provides students an opportunity to integrate all of the sciences with their other core subjects. It is designed for students from all levels.

Course Title: Engineering By Design
Course Number: 1595
Prerequisite: None
Credit: 2 Elective credits
Open to: All Grades
Description: During this course, students will study the design process and use it to guide their actions. After learning the basics of vinyl cutting, 3D printing, engraving, basic circuitry and soldering, students will use their creativity and newly developed skills to tackle real-world problems in their school or community.

Course Title: Advanced Placement Environmental Science
Course Number: 1516
Prerequisite: Environmental Science, Biology, Chemistry (at least concurrently), Teacher recommendation
Credit: 2 Science credits (This course will run in the spring)
Open to: Grades 11, 12 (Priority given to seniors)
Description: The AP Environmental Science course is designed to engage students with the scientific principles, concepts, and methodologies required to understand the interrelationships

within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$96.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Social Studies Department

In social studies courses, students will read actively, write to explain, analyze, and persuade, and evaluate sources for accuracy and relevance. Students will study the important ideas, institutions, movements, policies, and individuals that shaped the US. Students will also work toward understanding and participating in the democratic process, act with respect for the varied cultures and viewpoints of our community, and display awareness of local and global civic issues.

Students will fulfill the graduation requirements in Social Studies by completing AP Human Geography (9th grade) and either year-long AP US History (10th grade) or Early US History (10th grade) and US and the Modern World (11th grade).

Social Studies -- Core Courses

Course Title: Advanced Placement Human Geography

Course Number: 1225

Prerequisite: None

Credit: 2 Social Studies credits

Open to: 9th Grade

Description: In this course you will explore how humans have understood, used, and changed the surface of Earth. You'll use the tools and thinking processes of geographers to examine patterns of human population, migration, and land use. Specifically you will:

- Build your knowledge of populations & cultural patterns as you learn about the political organization of the world.
- Explore the patterns associated with human populations.
- Focus on how and why language, religion, & other cultural practices spread over space and time.
- Learn where humans first developed agriculture and how farming practices spread throughout the world.
- Explore the origins and influences of urbanization, examining cities across the world and the role of those cities in globalization.
- Study the origins and influences of industrialization as well as the role it plays in economic development.
- Learn about the tools & methods geographers use in their study of places.

Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the

procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Course Title: Early United States History
Course Number: 1222
Credit: 2 Social Studies credits
Open to: Grade 10
Description: This is the second course in the core sequence of social studies courses. It includes a study of the American Revolution, the United States Constitution, national development and expansion, and the Civil War and Reconstruction. Students will engage in challenging reading and writing assignments, including working with primary sources, with the support of the teacher. **Honors weight/status:** Students who earn an overall grade of at least a 3.25 (93) **AND** earn at least a 3.0 (90) on **ALL** of their standards **AND** complete required honors challenges will receive honors weight and designation on their transcript.

Course Title: Global Issues
Course Number: 1223
Prerequisite: None
Credit: 1 Social Studies credit
Open to: Grade 10
Description: Global Issues is a quarter-long course designed to give sophomores an opportunity to explore the world we live in today, and understand various perspectives on global issues. Students research a country and represent that country's perspective on contemporary issues around the world in Model United Nations simulations. Using parliamentary procedure, students act as delegates and engage in listening, speaking, and resolution writing. Research methods and writing using MLA format are taught in the course. Students are also required to engage in community service to address a local, state, or global issue of their choice.

Course Title: The United States and Modern World
Course Number: 1232
Credit: 2 Social Studies credits
Open to: Grade 11
Description: This is the third course in the core sequence of social studies courses. It includes a study of significant developments in the United States and around the world in the twentieth century. It is a continuation of the study of United States History begun in 10th grade Early United States History, and it includes a global perspective on the 20th century. Important themes and topics of this course are nationalism and imperialism, prosperity and depression, totalitarianism and democracy, World Wars I and II, the Cold War, and the Civil Rights Movement. Students will read and write extensively both in and outside of class. Students will engage in challenging reading and writing assignments, including working with primary sources with the support of the teacher. **Honors weight/status:** Students who earn an overall grade of at least a 3.25 (93) **AND** earn at least a 3.0 (90) on **ALL** of their standards **AND** complete required honors challenges will receive honors weight and designation on their transcript.

Course Title: ML Human Geography

Course Number: 1206
Prerequisites: Placement testing, Language Acquisition Committee Recommendation
Credit: 2 Social Studies credits
Open to: All Grades
Description: This course furthers the development of students' reading, writing, speaking and listening skills and strategies needed for social and instructional language acquisition and introduces key concepts and standards of Social Studies. Students will focus on building academic language, critical thinking and global competence skills through real - world investigations of current global issues. (IELD)

Course Title: ML Government & Politics
Course Number: 1164
Prerequisites: Placement testing, Language Acquisition Committee Recommendation
Credit: 2 Social Studies credits
Open to: All Grades
Description: This course furthers the development of students' reading, writing, speaking and listening skills and strategies needed for social and instructional language acquisitions to support key concepts focusing on the structure and interactions of the three branches of government at the local, state, and federal levels as well as study the civic responsibilities of a productive member of society. Primary sources will be utilized and the focus of the material will be emphasized with language acquisition, building up key vocabulary, and application to everyday life.

Course Title: Advanced Placement United States History
Course Number: 1230 & 1230A: **This is a year long course and students must sign up for both semesters.**
Prerequisite: None
Credit: 4 Social Studies credits
Open to: Grade 10
Description: United States History is a survey course, equivalent to an introductory course in college, that requires students to be proficient in specific historical thinking skills. The curriculum covers the period from the Columbian Exchange, to the first English settlements, the creation of the modern United States of America, and all the way to the present day. Students will be trained to analyze and interpret primary sources (including documentary material, maps, statistical tables, pictorial and graphic evidence of historical events), and to write document-based essays and analytical papers. Students will learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship. The class will be taught over both semesters of the sophomore year, and success will earn students credit for both early U.S. History, and U.S. in the Modern World. The skills taught in this class will help students when they come to take further Advanced Placement classes in their junior and senior years.
Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Social Studies -- Electives

Course Title:	Government and Politics
Course Number:	1291
Prerequisite:	None
Credit:	2 elective credits
Open to:	Grades 11 and 12
Description:	In this semester-long course, students will deepen their understanding of the U.S. government and politics by exploring political ideologies and beliefs, political participation, interactions among branches of government, and civil liberties and civil rights. Students will examine the role of civic participation in a representative democracy and how competing policy-making interests impact social and economic issues. The course will also include an exploration of the Judicial system and Supreme Court cases.
Course Title:	Sociology (this course will not be offered again until 25-26)
Course Number:	1293
Prerequisite:	None
Credit:	2 elective credits
Open to:	Grades 10, 11 and 12
Description:	Students in this course will study contemporary human society. Sociology combines political science, economics, and social psychology to analyze social institutions and the ways humans interact. It is designed for students of all levels.
Course Title:	Economics
Course Number:	1295
Prerequisite:	None
Credit:	2 elective credits
Open to:	Grades 11 and 12
Description:	This course provides an introduction to the study of economics with special attention to the U.S. Whether considering future studies in economics or simply filling their schedule with a social studies elective, students will walk away prepared with baseline knowledge of macro and microeconomics and personal finance. We will evaluate inequalities in economic systems, simulate real-world scenarios, enhance our critical thinking skills, and have fun while learning together.
Course Title:	Psychology
Course Number:	1298
Prerequisite:	None
Credit:	2 elective credits
Open to:	Grades 10, 11 and 12
Description:	Psychology is the study of human behavior and mental processes. Students will study topics such as brain and behavior, human development, social psychology, abnormal psychology, and influential experiments in twentieth century psychology. Students will engage in research, discuss issues, and think deeply and analytically. Students will gain a better understanding of themselves and others, and how humans relate to each other.

Recommended for students who have a curiosity about the origins of, and explanations for human thinking and behavior. Must be ready to examine research studies.

Course Title: Advanced Placement Psychology
Course Number: 1299
Prerequisite: Students should be able to read college level textbooks and write grammatically correct, complete sentences, while applying the conventions of standard written English in their writing. Students need a strong academic commitment to the required level of work.
Credit: 2 elective credits
Open to: Grades 11 and 12
Description: Advanced Placement Psychology is an accelerated survey course, equivalent to an introductory course in college, which introduces students to how psychologists use scientific study to build knowledge about the behavior and mental processes of human beings. Students will study all major subfields of the discipline, including specific research, theorists, and aspects of each field. Students will do a significant amount of independent reading and note taking, and engage in classroom activities to deepen their understanding. Students will gain a better understanding of themselves, of others, and of the human experience. Recommended for students who have a curiosity about the origins of, and explanations for, human thinking and behavior. Must be ready to examine research studies and complete a significant amount of independent work.
Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Course Title: Advanced Placement US Government and Politics
Course Number: 1233
Prerequisite: Early United States History or AP US History (Part 1)
Credit: 2 elective credits
Open to: Grades 11 and 12
Description: AP US Government and Politics is an accelerated survey civics course, equivalent to an introductory course in college, which explores different aspects of the US Government and a person's civic obligations.. In the course, students will explore the Constitution and the interactions of the three branches of government, how civil liberties and rights have influenced the need to balance freedom and order, how political ideologies have influenced decisions in our society and how citizens have influenced government decisions through civic actions. Students will use and practice using skills that include analyzing data to find trends to develop conclusions, connecting political concepts to real life situations, read and analyze text and other visual sources, create thesis statements in essays with supporting evidence and explain the impact of decisions from US Supreme Court cases that have an impact on society.
Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Course Title: Advanced Placement World History: Modern
 Course Number: 1227
 Prerequisite: Students must have completed their required social studies courses (APHUG, APHUSH, or APHUG, EUSH, and 20th century US Modern World)
 Credit: 2 elective credits
 Open to: 11 or 12
 Description: AP World History: Modern is an introductory college-level modern world history course. Students cultivate their understanding of world history from c. 1200 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

World Languages Department

Knowledge of other languages and cultures is central to self-expression and human understanding in an increasingly diverse and ever-changing world. It is through language that we communicate and it is through culture that we express our most important thoughts and ideas.

One of the best indicators for success in college is studying four or more years of a world language, any world language, in high school. Come and join the world's community of multilingual people and, in the process, be more marketable to colleges and employers and be better prepared for the SAT exam. Let us bring the music, food, art and customs of the world to your doorstep.

Recommended Sequence of Courses of Study in World Languages:

Middle School	No Prior Study of World Language	Entering Proficiency Level of Novice-mid	Entering Proficiency Level of Novice-high
Grade 9	Level I & Level II	Level II & Level III	Level III & Level IV
Grade 10	Level III & Level IV(Honors)	Level IV(Honors) & Level V (Honors)	Level V (Honors)

Grade 11	Level V (Honors)	Advanced Placement	Advanced Placement
Grade 12	Advanced Placement or Early College course	Early College course	Early College course

Course Title: Arabic I
Course Number: 1307
Prerequisite: This course is designed for beginning Arabic students. (Novice-low)
Credit: 2 Elective credits
Open to: All Grades
Description: This introductory course is for beginning students of Arabic with no prior knowledge of the language. There will be an emphasis on three modes of communication (interpersonal, interpretive, and presentational) embedded in culture, in addition to the comparisons, connections and community standards central to all world language courses. Students will gain a new perspective on global competence as they investigate the Arab world, recognize various perspectives (within and throughout the Arab world), communicate ideas and take action in their community.

Course Title: Arabic II (Novice-mid)
Course Number: 1308
Prerequisite: Arabic I
Credit: 2 Elective credits
Open to: All Grades
Description: This course is a continuation of Arabic I; it continues to focus on the development of interpersonal skills in the realms of speaking and writing. The ongoing development of global competency skills continues through the study of Arabic culture and perspectives.

Course Title: Arabic III (Novice-high)
Course Number: 1308B
Prerequisite: Arabic II, (or Teacher recommendation)
Credit: 2 Elective credits
Open to: All Grades
Description: This course is designed as a continuation of Arabic II where students will develop and strengthen their written and oral proficiency in Arabic. Emphasis is on the development of interpretive skills such as reading and writing, and exposure to authentic resources to increase literacy in Arabic.

Course Title: Mandarin Chinese I (Novice-low)
Course Number: 1309
Prerequisite: None
Credit: 2 Elective credits
Open to: All Grades
Description: This introductory course to Mandarin Chinese is for beginning students with no prior knowledge of the language. A focus on communication will include emphasis on Chinese

cultural elements in addition to language. This course is provided through a partnership with the Confucius Institute at USM and will feature a native language college professor as well as an opportunity to study abroad during the summer in China.

Course Title: Mandarin Chinese II (Novice-mid)
Course Number: 1310
Prerequisite: Mandarin Chinese I
Credit: 2 Elective credits
Open to: All Grades
Description: This Level II course is open to heritage speakers of Mandarin Chinese as well as students who have successfully completed the Level I course at Deering High School. The course will focus on literacy skills as students work toward greater proficiency in Chinese. Students will broaden their exposure to and understanding of cultural elements of Chinese society as they develop greater communication skills. This course is provided through a partnership with the Confucius Institute at USM and will feature a native language college professor as well as an opportunity to study abroad during the summer in China.

Course Title: French I (Novice-mid)
Course Number: 1301A
Prerequisite: This course is designed for students who are beginning their study of French at the high school level.
Credit: 2 Elective credits
Open to: All Grades
Description: Would you like to travel the world and be able to communicate with francophones in THEIR language? Sign up for French I and study both language and culture. In this course there is an emphasis on communication skills in real-life situations where the classroom is your laboratory for language use! Students will learn about, and use the presentational, interpretive and interpersonal modes of communication in an authentic, fun, high-tech environment.

Course Title: French II (Novice-high)
Course Number: 1302
Prerequisite: Students who have successfully completed two years of French study at the middle school or Deering students who have completed French I. (Entering proficiency level of novice-mid)
Credit: 2 Elective credits
Open to: All Grades
Description: Would you like to continue your studies in French? Enroll in French II where you will be able to continue developing all three of the modes of communication while learning about the world, as per the Portland Public School Standards in World Languages. In this course, you will continue to grow in your capacity to understand and communicate in French. Come learn to appreciate another culture and learn to converse in an authentic, fun, high-tech environment.

Course Title: French III (Intermediate-low)
Course Number: 1303

Prerequisite: Middle School students at proficiency level of novice-high or DHS students who have completed French II.
Credit: 2 Elective credits
Open to: All Grades
Description: Would you like to continue working on your fluency in French and learn more about the cultures of the French speaking world? Expand all of your language skills as you continue to develop along the spectrum of PPS Standards for World Languages in an authentic, fun, high-tech environment.

Course Title: French IV (Honors) (Intermediate-mid)
Course Number: 1304
Prerequisite: French III and teacher recommendation
Credit: 2 Elective credits
Open to: All Grades
Description: Continue watching your skills develop in French as you move through this engaging, enjoyable and communicative course! This course will continue along the spectrum of developmental skills for world languages. As your confidence and capabilities develop, you will be able to express your thoughts and opinions more clearly than in prior levels of French. Students enrolled in this class will apply for the Seal of Biliteracy as part of the course.

Course Title: French Seminar for Native Speakers (varying proficiency levels)
Course Number: 1306A
Prerequisite: Approval from your School Counselor and/or teacher
Credit: 2 Elective Credits
Open to: All Grades
Description: The Seminar is designed to meet the unique needs of French-speaking students in order to learn more about their language and cultural heritage. The course expands the students' French language skills through investigations of the French/African experience, literature, art, music and history. An emphasis will be placed on development of literacy skills as well as addressing common writing and grammatical deficiencies. Students will enhance their career opportunities and begin to satisfy foreign language requirements for university placement. Upon the successful completion of this course and its related assessments, students will be appropriately placed in an advanced level French course.

Course Title: French V (Honors) (Intermediate-High)
Course Number: 1305
Prerequisite: French IV and teacher recommendation
Credit: 2 Elective credits
Open to: All Grades
Description: In this Honors level course, students will continue building fluency in French through the ongoing integration of interpersonal, interpretive and presentational communicative skills. Cultural connections will include studies of French-speaking immigration to the United States and in-depth studies of current issues in Africa. Through the use of authentic resources including online newspapers, podcasts, video sources and journals, students will fine tune their grammatical skills while developing greater proficiency in the use of the French language. As preparation for the Advanced Placement exam, this course will

incorporate units which include the AP themes of beauty and aesthetics, global challenges, science and technology, families and communities, personal and public identities and contemporary life. Students enrolled in this class will apply for the Seal of Biliteracy as part of the course.

Course Title: Advanced Placement French Language and Culture (Advanced-low)
Course Number: 1306B
Prerequisite: French V and teacher recommendation
Credit: 2 Elective credits
Open to: All Grades
Description: The goal of this course is to prepare students for the College Board's Advanced Placement French Language and Culture Exam, the equivalent of a fifth semester university level language course. Students will continue to develop their presentational, interpersonal and interpretive language skills through the use of interactive and authentic materials and instruction. Instruction will be conducted via authentic French literature, print, digital and visual media to help students arrive at a deeper and more complex cultural understanding of the multiple and various "French-speaking" cultures of the world. This course will be conducted entirely in French. Content will be based on the AP themes of Beauty and Aesthetics, Families and Community, Personal and Public Identities, Contemporary Life, Science and Technology and Global Challenges. Students enrolled in this class will apply for the Seal of Biliteracy as part of the course.

Students are expected to take the National Advanced Placement exam in May. For information about the cost and fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Course Title: Spanish I (Novice-mid)
Course Number: 1311A
Prerequisite: This course is designed for students who have had little or no instruction in Spanish
Credit: 2 Elective credits
Open to: All Grades
Description: Did you know that the United States has one of the world's largest Spanish-speaking communities? Do you want to prepare yourself for the future and start getting ready for college? Then sign up for Spanish 1! Come and use technology, art, music, games, theater and field trips to compare and contrast your culture with that of teenagers in Paraguay, Costa Rica, Spain, Mexico and parts of the Spanish-speaking United States. Students will develop the speaking and writing skills necessary to communicate in basic Spanish.

Course Title: Spanish II (Novice-high)
Course Number: 1312
Prerequisite: Students who have successfully completed two years of Spanish at the middle school (entering proficiency level of novice-mid) or have completed Spanish I at DHS
Credit: 2 Elective credits
Open to: All Grades

Description: Have you already studied Spanish? Do you want to continue to develop your language skills? Spanish II is a continuation of Spanish 1 with an emphasis on the culture of Colombia, the Dominican Republic and Mexico. You will expand your interpersonal, interpretive and presentational skills while learning the past tense and new vocabulary. Be prepared to continue increasing your communication skills in an engaging and relevant course!

Course Title: Spanish III (Intermediate-low)

Course Number: 1313

Prerequisite: Middle School students at proficiency level of novice-high or DHS students who have completed Spanish II

Credit: 2 Elective credits

Open to: All Grades

Description: Have you been studying Spanish for a while? Do you want to develop your fluency and learn about the cultures of the Spanish speaking world? Spanish III builds upon skills developed in Spanish II to help you become a strong communicator in your writing and speaking. Learn about global challenges facing teenagers in Nicaragua, about cooking in Cuba and about teenagers' social lives in Perú. Expand all of your language skills as you develop more proficiency in your interpersonal, interpretive and presentational communication.

Course Title: Spanish IV (Honors) (Intermediate-mid)

Course Number: 1314

Prerequisite: Spanish III (entering proficiency level of intermediate-low) and teacher recommendation

Credit: 2 Elective credits

Open to: All Grades

Description: Continue developing your proficiency in Spanish through the use of authentic resources such as videos, podcasts and news articles in this course. Topics of discussion include the youth of Spain, digital citizenship in Chile and environmental sustainability in Colombia. As your knowledge of the past, future, conditional and subjunctive increases, you will be able to read short stories and express your thoughts and opinions more clearly when communicating. Students enrolled in this class will apply for the Seal of Biliteracy as part of the course.

Course Title: Spanish Seminar for Native Speakers (varying proficiency levels)

Course Number: 1313A

Prerequisite: Approval from your School Counselor and/or teacher

Credit: 2 Elective credits

Open to: All Grades

Description: The Seminar is designed to meet the unique needs of Spanish-speaking students in order to learn more about their language and cultural heritage. The course expands the students' Spanish language skills through investigations of the Latino experience, literature, art, music and history. An emphasis will be placed on development of literacy skills as well as addressing common writing and grammatical deficiencies. Students will enhance their career opportunities and begin to satisfy world language requirements for university placement. Upon the successful completion of this course and its related assessments,

students will be appropriately placed in an advanced level Spanish course. "¡Recuerden, el que es bilingue, vale por dos!"

Course Title: Spanish V (Honors) (Intermediate-high)
Course Number: 1315
Prerequisite: Successful completion of Spanish IV or teacher recommendation; entering proficiency level of intermediate-low
Credit: 2 Elective credits
Open to: All Grades
Description: Spanish V seeks to develop competencies to prepare students for the Advanced Placement (AP) course and exam. In this Honors level course, students will continue building fluency in Spanish through the ongoing integration of interpersonal, interpretive and presentational communication skills. Cultural connections will include studies of Latino immigration to the United States and in-depth studies of current events and global issues in Latin America. Through the use of authentic resources including online newspapers, podcasts, video sources and journals, students will fine tune their grammatical skills while developing greater proficiency in the use of the Spanish language. As preparation for the Advanced Placement class, this course will incorporate units which include the AP themes of beauty and aesthetics, global challenges, science and technology, families and communities, personal and public identities and contemporary life. Students enrolled in this class will apply for the Seal of Biliteracy as part of the course.

Course Title: AP Spanish Language and Culture (Advanced-low)
Course Number: 1317
Prerequisite: Spanish V (Honors) and teacher recommendation (entering proficiency level of intermediate-high)
Credit: 2 Elective credits
Open to: All Grades
Description: The goal of this course is to prepare students for the College Board's Advanced Placement Spanish Language and Culture Exam, the equivalent of a fifth semester university level language course. Students will continue to develop their presentational, interpersonal and interpretive language skills through the use of interactive and authentic materials and instruction. This course will be conducted entirely in Spanish. Content will be based on the AP themes of Beauty and Aesthetics, Families and Community, Personal and Public Identities, Contemporary Life, Science and Technology and Global Challenges. Instruction will be conducted via authentic Spanish literature, print, digital and visual media to help students arrive at a deeper and more complex cultural understanding of the multiple and various "Spanish-speaking" cultures of the world.

Students are expected to take the National Advanced Placement exam in May. Students are expected to take the National Advanced Placement exam in May. For information about the cost and fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor. Students enrolled in this class will apply for the Seal of Biliteracy as part of the course.

Visual & Performing Arts

Making art fosters persistence, innovation, and problem solving skills by encouraging students to work on projects over sustained periods of time. Students are encouraged to experiment and take creative risks. Students in art classes will create and share for aesthetic appreciation and personal expression. The Deering art curriculum is designed to prepare students with the skills necessary for creating art through drawing, painting, sculpting, ceramics, collage, graphic design and printmaking. In addition to developing the technical skills specific to art, coursework will also strengthen students' observational and problem solving skills. The study of diverse art and artists are incorporated into the curriculum.

Course Title: Art I Foundations FA
Course Number: 1901
Prerequisites: None
Credit: 2 Fine Arts credits
Open to: All Grades
Description: This course introduces students to the Elements of Art and Principles of Design while developing two and three- dimensional skills and techniques. Studio experiences in the classroom will give students opportunities to explore a variety of media while developing their individual style and creative problem solving skills. Students will demonstrate their ability to describe, analyze, and interpret their own artwork and the work of others through discussions, critiques, and writings. Art serves as a universal language- as a means of understanding the history, culture and values of societies around the world.

Course Title: Advanced Art FA
Course Number: 1918
Prerequisite: Successful completion of an upper level art course (Sculpture/3D, Drawing & Painting, Ceramics)
Credit: 2 Fine Arts credits
Open to: All Grades
Description: Students work intensively in a variety of themes, approaches, and styles as they learn to make art that is both personal and reflective of an increased understanding of the many aspects of art and art making. A studio environment in which students work independently while sharing ideas, work methods and opinions is established and fostered. Drawing, painting, collage, printmaking, sculpture, and mixed media will be explored.

Course Title: Advanced Placement Studio Art FA
Course Number: 1906
Prerequisite: Completion of Art 1 Foundations and Advanced Art. A willingness and ability to meet AP standards and successful completion of summer art assignments due in September.
Credit: 2 Fine Arts credits
Open to: Grades 11 and 12
Description: AP Studio Art is a year-long course for highly motivated students who are seriously interested in the study of art. The class is equivalent to an introductory college-level studio art course. During the course, students will develop a portfolio of work to demonstrate mastery of the principles of two-dimensional design. Students will work in a variety of two-dimensional media including graphic design, collage, fabric design, drawing, illustration, painting, and printmaking. Students will be encouraged to become independent

thinkers who will contribute inventively and critically to their culture through the making of art. The College Board requires a portfolio of approximately 15-20 works in two separate sections. Portfolios are submitted in May with a cost of \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

Course Title: Clay/Ceramics I
FA
Course Number: 1907
Prerequisites: Successful completion of Art I Foundations with priority given to students who have completed two or more art courses
Credit: 2 Fine Arts credits
Open to: All Grades
Description: Ceramics I is designed for students interested in creating functional and sculptural works in clay. There will be a focus on clay-specific handbuilding techniques such as pinch, coil and slab as well as the basics of glazing. Students will be introduced to the history of ceramics, the many purposes of clay, and properties of the material. Students will be expected to demonstrate and explain ceramic handbuilding processes, techniques, and terminology. A studio atmosphere that enables creative thinking, class discussions and global citizenship will be established and fostered.

Course Title: Clay/Ceramics II
FA
Course Number: 1910
Prerequisites: Successful completion of Ceramics I
Credit: 2 Fine Arts credits
Open to: Grades 10, 11, 12
Description: Ceramics II offers advanced experience in working with clay. Students will continue to use handbuilding techniques learned in Ceramics I to create forms that are more complex and meaningful. In addition, students will be taught how to throw on the potter's wheel. More advanced glazing and embellishment techniques will also be covered. Students can expect to refine their skills in ceramic processes and techniques and continue to participate in a studio atmosphere that enables creative thinking, class discussions and global citizenship.

Course Title: Adaptive Art
Course Number: 1911
Credit: 2 Fine Arts credits
Open to: All grades per IEP
Description: Adaptive Art is an introductory art course for students in special education. Students will learn how to create and critique art through the application of the elements and principles of design. We will complete projects in drawing, painting, colored pencil, pastel, scratchboard, printmaking and sculpture. Subjects will include design, architecture, portraits, still life, and more. There will be a big focus on media exploration and expressing and communicating through art. Students will learn how the arts can be a means of renewal and recreation and a way to express ideas and learn from others.

Course Title: Drawing & Painting
FA
Course Number: 1916
Prerequisites: Art 1 Foundations
Credit: 2 Fine Arts credits
Open to: Grades 10, 11, 12
Description: In this course, students will be introduced to a variety of drawing and painting materials including, but not limited to: charcoal, graphite, conte, pastel, oil pastels, colored pencils, acrylic, gouache, and watercolor. Students will work with a range of subject matter such as portraits, landscape, still life, design, and more. Students will work from observation as well as imagination, incorporating styles and techniques to create meaningful, beautiful artwork.

Course Title: Sculpture/3D Design
FA
Course Number: 1917
Prerequisites: Art 1 Foundations
Credit: 2 Fine Arts credits
Open to: Grades 10, 11, 12
Description: In this course, students will be introduced to a variety of three-dimensional design concepts and materials. In addition to applying elements and principles of design concepts to 3D forms, students will develop understanding of principles specific to sculpture such as space, light, sound, kinetics, and movement. Students will work in materials including, but not limited to: plaster, wood, wire, metal, fiber, clay, and paper to create such objects as jewelry, masks, figures, assemblages, puppets, as well as functional and decorative objects. Students will gain understanding in concepts of subtractive, additive, and modeled sculpture. There will be an emphasis on developing skills as a versatile thinker, an effective communicator, and a global citizen.

Music

The Deering High School music program offers courses designed to meet the needs of all students, from the most advanced and gifted to the less experienced. We understand that music is an important and basic part of everyone's education, and wish to encourage student involvement. All music courses use the Maine State Standards for Music Education and are designed to provide students with the skills necessary to become lifelong musicians and engaged listeners.

Independent studies may be arranged with ensemble directors to fulfill a maximum of one term enrollment requirement.

Course Title: Intro to Digital Music
Course Number: 1972
Prerequisites: none
Credits: 2 Fine Arts credits
Description: This course is open to anyone and is designed to increase your knowledge of music and its composition. The course will focus on the fundamentals of music, notation, rhythm, melody, harmony, timbre, texture, and form. Students will take that musical knowledge and learn how to compose music in various styles, including but not limited to hip-hop, trap, R&B, Pop,

folk, rock, and EDM. Students will learn the nuance of recording, mixing, editing, sampling, composing, and producing music in any style of their choice. The course will use the program SoundTrap as recording software, and students will create high-quality recordings and electronic compositions using a wide array of tools and techniques. No specific prior training is required.

Course Title: Intro to Podcast Composition
Course Number: 1974
Prerequisites: Intro to Digital Music
Credits: 2 Fine Arts credits
Open to: All Grades
Description: This course is open to anyone who wants to **expand their skills in music production and storytelling** through the medium of a podcast. The course will focus on the fundamentals of music, texture, and will involve a significant amount of research and writing composition. Students will take the musical knowledge and practices they learned from Intro to Digital Music (prerequisite) and apply it to creating high-quality podcast style recordings. Students will learn the nuance of recording, mixing, editing, sampling, and producing recorded stories and interviews. The course will use the program SoundTrap as recording software. No specific podcasting experience is required.

Course Title: Music Ensemble
Course Number: 1975
Prerequisites: None
Credits: 2 Fine Arts credits
Open to: All Grades
Description: Music Ensemble is designed for students who are involved in our instrumental and choral programming. Groups will meet during scheduled Learning Center or after school times. This course currently includes Concert/Jazz band, Chorus or Handbells. The groups will be guided by the music director. Students who attend the rehearsals will receive fine arts credit depending on how frequently they attend and whether they complete the concert performance.

Course Title: Intro to Guitar and Piano
Course Number: 1976
Credit: 2 Fine Arts Credits
Open to: All Grades
Description: This is a beginning-level music course, designed for students who wish to learn the fundamentals of music through playing the guitar and/or piano. Music theory will be covered as it applies to the instruments, including notes, rhythms, key signatures, scales, intervals, harmony, and chord structure. Grading will be based on playing and performance as well as formative and summative assessments.

Course Title: Chorus
Course Number: 1978
Credit: 2 Fine Arts credits
Open to: All Grades

Description: Chorus is open to all students who love to sing and are interested in developing their voices and music skills. This ensemble will rehearse choral music from a wide range of genres including standard choral repertoire, popular choral ensembles, show tunes and world music. Two major concerts will be presented in the second semester, (the All-City concert in March and the Spring Concert in May), and may also sing at various school and community events, up to three per semester. Enrollment in this course makes a student eligible to audition for District 2 and the Maine All-State honors festivals.

Course Title: Adaptive Music

Course Number: 1971

Credit: 2 Fine Arts credits

Open to: All grades per IEP

Description: The adaptive music course offers an exploratory music experience for students with unique needs. Students will investigate sound by both listening to and creating music. Components of this class include but are not limited to vocal exploration, steady beat, simple song literature, creative movement, classroom instrument exploration and individual/group sharing.

Course Title: Orchestra

Course Number: 1990

Prerequisite: Previous Orchestra experience or teacher approval

Credit: 2 Fine Arts credits

Open to: All Grades

Description: The Deering High School Orchestra combines forces with the Portland High School Orchestra and qualified students from Casco Bay High School in a variety of performances and community events.
At the Winter and Spring concerts, and at the March Portland Public Schools Music Festival, the Orchestra performs repertory spanning four centuries, and features students as composers, arrangers, conductors and soloists. The Orchestra is expanding its repertory and is inviting qualified woodwind, brass and percussion-timpani students to perform such works as Schubert's Symphony No. 7 in C ("The Great"), and Bach's Orchestral Suite No. 1. The Orchestra has additional components:

- The Gig Orchestra performs at community functions such as Citizenship ceremonies at US Federal Court, events at City Hall, National Honor Society Convocations, school Open Houses and graduations
- Musical Theater involves qualified students as "pit" musicians for shows such as South Pacific
- The Cello-Bass Ensemble features our cello section and bass section in select repertory.

Orchestra is a one-year course. Class enrollment in good standing qualifies a student to audition for District II and All-State Honors Orchestra. Membership in Orchestra may require after-school rehearsals and performances. Students in good standing are eligible to participate in Honors level Orchestra, with additional coursework that may include program annotation, library work and other assignments.

Course Title: Orchestra Honors

FA

Course Number: 1990H

Prerequisite: Teacher recommendation
Credit: 2 Fine Arts credits
Open to: All Grades
Description: This course is for students in Orchestra who wish to excel in performance of orchestra literature. The honors section meets concurrently with Orchestra. Do not sign up for Orchestra if you are signing up for Orchestra Honors. In addition to the performance and practice requirements of Orchestra, members will be required to audition for the District II and All-State honors ensembles.

Physical Education and Health

The Physical Education curriculum is essential in helping Deering High School achieve its mission to develop the mind, body and character of its students. It offers a variety of activities that encourage students to develop lifelong involvement in sports and total fitness. Students are encouraged to use their knowledge of personal and community health to learn to accept responsibility for personal decisions and actions and to make informed decisions throughout high school and beyond.

Course Title: Physical Education
Course Number: 1003
Prerequisite: None
Credit: 2 Physical Education credit
Open to: Typically fulfilled in grade 9, open to grades 10, 11, and 12
Description: The physical education curriculum offers a variety of activities encouraging lifelong involvement in sports and total fitness. The program promotes the development of physical, social, and mental health. In each class, students engage in warm-up, cardiovascular, flexibility, muscular strength, endurance, and cool down activities. An added dimension to the physical education program is the fitness center which is equipped with cardiovascular and strength equipment.
Students must earn two credits of Physical Education in order to meet graduation requirements.

Course Title: Personal Fitness
Course Number: 1009
Prerequisite: None
Credit: 2 Physical Education credit
Open to: Preference to 11 & 12, but open to all grades.
Description: Students enrolled in Personal Fitness will learn and practice exercises and activities that enhance flexibility, core body strength, cardiovascular fitness, and overall muscular strength. The fitness center will be the primary learning space, but outdoor fitness along with nutrition will also be important components. After being taught a variety of exercises and routines, the successful student will develop and implement an individual fitness plan. Students must earn two credits of Physical Education in order to meet graduation requirements.

Health

The Health curriculum is essential in helping Deering High School achieve its mission to develop the mind, body and character of its students. In Health, students develop their reading, writing, listening and speaking skills as they grapple with issues as diverse as mental and emotional health, STD's, violence prevention and personal safety. They use their knowledge of personal and community health to learn to accept responsibility for personal decisions and actions and to make informed decisions throughout high school and beyond.

Course Title:	Health
Course Number:	1025
Prerequisite:	None
Credit:	1 Health credit (1 quarter)
Open to:	Grades 10-12
Description:	Health focuses on the promotion of lifelong physical, social, and mental/emotional wellness. Topics include fitness, mental illness/disorders, nutrition, substance use and abuse, STI's, teen issues such as bullying, internet safety, texting and driving, healthy relationships, suicide prevention, stress, eating disorders and CPR. Students will look at these topics through a local and global perspective.

Multimedia Technology

The Multimedia Technology Department understands that today's students are growing up immersed in a digital and Internet driven world. Through varied courses, students will ethically use technology to gather, organize, and communicate information to be better prepared to live in a diverse and ever-changing world. Courses reinforce the academic expectations of reading and writing, creating and presenting, and utilizing math to answer questions and solve problems. Choose one or more courses to gain serious technological knowledge.

Course Title:	Computer Science Principles
Course Number:	1703
Prerequisite:	None
Credit:	2 Elective credits
Open to:	Grades 9, 10,11,12
Description:	Designed for 9 - 12 grade students, CS Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. Students learn about the challenges of supporting a giant network like the world wide web, while solving problems about encoding and transmitting data using the Internet Simulator. Students get hands-on experience with concepts like binary and pixels, text compression, cryptography, and more through computational widgets. Using the JavaScript language, students learn about algorithms and program design as they create a series of real working, shareable apps with App Lab.

Course Title:	Advanced Placement Computer Science A
Course Number:	1701
Prerequisite:	None
Credit:	2 Elective credits

Open to: Grades 10,11,12

Description: Students will continue exploring the concepts introduced in Intro to Computer Programming and prepare to take the Advanced Placement exam in Computer Science. Successful completion of the exam will earn college credit at most colleges. In this class the pace will be quick and the work will be extensive, similar to a college setting. Class time will be split between lecture and hands-on applications on the computer. We will cover object-oriented methodology with an emphasis on problem solving and algorithms. This class is excellent for those wishing to pursue a STEM (science, technology, engineering or math) career and also those who enjoy logical problem solving. After the AP exam, students will have time to explore cutting-edge technologies, such as mobile phone programming, electronics, or web development.

Students are expected to take the National Advanced Placement exam in May. The cost of the exam is \$97.00. For information about fee reductions, go to Collegeboard.com and Visit Fee Reductions for AP Exams for information about eligibility criteria and the procedure for claiming College Board fee reductions for AP Exams and talk with your school counselor.

This course counts towards the STEM endorsement credit requirement.

Course Title: Computer Science Fundamentals

Course Number: 1704

Prerequisite: None

Credit: 2 Elective credits

Open to: Grades 9, 10,11,12 (ML accessible)

Description: This course explores many of the innovations taking place in computer science. The course will build a foundation of programming concepts, computational thinking, and problem-solving skills. Depending upon individual and group interests, students will also explore how to create apps, animations, robotics, web design, AI/ML, games in JavaScript, encryption, text compression, and other computer science concepts. This course builds a solid foundation for other courses taught in the district including CS Principles and AP CSA

Course Title: Digital Imaging & Editing

Course Number: 1790A

Prerequisite: None

Credit: 2 Fine Arts credits

Open to: All Grades

Description: Learn the basics of the world's most widely used digital editor. Through this class, students will learn to apply the power of digital editing to explore, create, manipulate, and share in the world of digital arts. Students need not have any previous computer experience. Students will use web-based editors to adjust simple digital images, to manipulate basic images into abstract products, and combine various types of images into imagination generated products. Students of this course will realize the potential that digital media may make possible both as a skill and a potential job opportunity. Students will also develop a greater understanding and appreciation of photography, graphic design, and the melding of these into the medium of digital arts.

Course Title: Technology and Social Activism

Course Number: 1752

Prerequisite:	None
Credit:	2 Elective credits
Open to:	All Grades
Description:	This course will help students learn to use technology to change the world. Students will work individually and collaboratively to use technology to develop and share their message through project-based learning. Students will also explore how technology is used in social activism, both contemporary and historical. Students will learn to use a variety of technology including: Digital Photography, Videography, Photo-editing, Animation, Graphics, Fine Art, Podcasts, Blogs, and an unlimited number of Apps and Web-based Software Programs. Projects and student interest would determine the needed technology and tools. Projects will culminate with authentic social outreach and/or community building. This could be taught as either a quarter or semester length course (1 credit this year, with a plan to move to a semester next year).

Senior Capstone Experience

Course Title:	Senior Capstone
Course Number:	1200
Prerequisite:	None
Credit:	1 Elective credit
Open to:	Grade 12
Description:	Students in this course will develop and create a major project that allows them to explore an interest which represents an area of focus that they are passionate about. The senior capstone project will reflect the responsibilities that come with being an engaged citizen on a local and global level. The senior capstone project and presentation will be the summative demonstration for the Maine Guiding Principles and Portland Public Schools goal of students graduating as responsible and involved citizens and self directed and lifelong learners.

Programs and Service

English Language Development Program

The purpose of English language development (ELD) at Portland Public Schools is to advance Multilingual Learners' (MLs) language development and promote their academic achievement by integrating both language and content standards. ELD programming provides language instruction in listening, speaking, reading, and writing, and prepares students for general education by focusing on the social and academic language required across disciplines leading to a proficiency-based diploma. Placement and the curriculum is aligned to WIDA's [English Language Development Standards](#), which capitalizes and builds upon the assets students bring to their learning: their cultural and linguistic practices, skills, and ways of knowing from their homes and communities.

For more information on the proficiencies targeted in each course, see the chart English Language Proficiency (ELP) Performance Definitions below. Note that Intensive ELD (IELD) courses are designated for students of ELP levels 1 and 2. Cognitive Academic Language (CAL) courses are designed for ELP levels 3-5.

ELD Performance Definitions				
<i>Language development is fluid and dynamic. Levels are not static, and can be different in different domains</i>				
ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
§ Single words, phrases, or language chunks to represent ideas. § Phrase-level patterns and structures § Everyday social, instructional, and content words and expressions	§ Emerging presentation of ideas in phrases or short sentences § Repetitive, formulaic grammatical structures across specific content areas § General social, instructional, and content words/expressions, including cognates	§ A series of extended sentences and related ideas § Repetitive and <i>some</i> complex grammatical structures with patterns characteristic of specific content areas § Some content-specific and academic vocabulary, including cognates	§ Expanded related ideas in connected discourse with a variety of sentences § A variety of complex grammatical constructions with patterns characteristic of specific content areas. § Content-specific and some technical academic vocabulary.	§ Multiple complex sentences, presented cohesively and coherently § Multiple phrases and clauses with patterns characteristic of specific content areas § Academic, content-specific, and technical vocabulary

Adopted from Massachusetts Department of Education Next Gen ELL Project 2016

All ELD courses prepare students for proficiency-based graduation requirements by focusing on :

- Supporting development of academic language proficiency through speaking and listening.
- Supporting development of academic language proficiency through attention to syntax and academic vocabulary in complex text and speech.
- Ensuring that students have opportunities to grow academic vocabulary through word study, close reading, and a volume of reading.
- Providing opportunities for students to read complex text closely and analytically on a regular basis, gradually developing students' ability to learn from complex text independently.
- Increasing the volume and range of reading and address fluency for those students who need it.
- Helping students use evidence to inform, argue, and analyze (write and speak with support from sources).

- Providing regular opportunities for short, focused research

To succeed, MLs must engage with well-designed curricula that are aligned to WIDA English Language Development Standards, and the Maine Learning Results. MLs at all proficiency levels have the same ability as native and proficient speakers to engage in cognitively complex tasks.

When MLs receive appropriate support to access ideas, texts, and concepts expressed in English, we can strategically work toward the simultaneous development of language, analytical practices, skills, and knowledge expected at the student's particular grade levels.

English Learner Program

Placement in ML classes is done in consultation with the student, their family and the Language Acquisition Committee (LAC) which includes ESOL and school counseling staff along with content area teachers. Each students' language background is considered along with their prior educational experience and English language learning. Since placement is based on English Language Proficiency rather than prerequisites, ongoing formative assessment by ESOL teachers informs individual student placement and progression in IELD courses. The following chart outlines the typical alignment of ELP levels with the IELD and CALS programming.

ELP Levels	English	Social Studies	Science	Math	Elective Options
ELP 1	English I for MLs	Language Acquisition of Social Studies	Language Acquisition of Science	Language Acquisition of Math	Phys.Ed. Personal Fitness Art Foundations Ceramics Chorus Intro. to Digital Music Comp Sci Fundamentals
ELP 2	English II for MLs <i>by LAC decision:</i> ML Foundations of Literacy (Beginner or Intermediate)	ML Human Geography (2 or 3)	ML Environmental Science (2 or 3)	Algebra 1a or YL Algebra	Phys.Ed. Personal Fitness Art Foundations Ceramics Chorus Intro. To Digital Music Comp Sci Fundamentals
				Algebra 1 Geometry Algebra 2	
ELP 3	English III MLs <i>by LAC decision:</i> ML Foundations of Literacy (Beginner or Intermediate)	ML Government and Politics (3 +)	ML Biology (3+)	<i>All Math Courses</i>	<i>All electives</i>

ELP 3+ <i>(sem 1 out of IELD)</i>	Academic Language and *English 2, 3, or 4	Early U.S. History U.S. & Modern	<i>All Science Courses</i>	<i>All Math Courses</i>	
ELP 3 - 5	*English 1 *English 2 English 3 English 4	<i>All Social Studies courses</i>			

Bold = Taught by ESOL Staff

Courses Descriptions

Course Title: English I for MLs, A & B
 Course Number: 1151A, 1151B
 Prerequisites: Placement testing, Language Acquisition Committee Recommendation
 Credit: 2 Elective credits per semester
 Open to: All Grades
 Description: This course will introduce reading, writing, speaking and listening skills and strategies needed for both social and instructional language acquisition using students' varied life and educational experiences, strengths, interests, and needs to bridge to academic content of US schooling. (IELD)

Course Title: English II for MLs, A & B
 Course Number: 1152A, 1152B
 Prerequisite: Placement Testing, Language Acquisition Committee Recommendation
 Credit: 2 English credits per semester
 Open To: All Grades
 Description: This course continues the development of students' reading, writing, speaking and listening skills and strategies needed for social and instructional language acquisition and introduces key concepts and standards of English Language Arts. (IELD)

Course Title: English III for MLs, A & B
 Course Number: 1153A, 1153B
 Prerequisites: Placement Testing, Language Acquisition Committee Recommendation
 Credit: 2 English credit per semester
 Open to: All Grades
 Description: This course furthers the development of students' reading, writing, speaking and listening skills and strategies needed for the communication of information, ideas and concepts necessary for academic success in the content of English Language Arts. This course supports reading fluency and strategy use with multiple genres with increased comprehension, as well as explicit writing instruction of a variety of text types (including summarizing, outlining and argument). Vocabulary and grammar instruction is integrated throughout each unit of study. (IELD)

Course Title: Language Acquisition for Social Studies
 Course Number: 1203

Prerequisites:	Placement testing, Language Acquisition Committee Recommendation
Credit:	2 elective credits
Open to:	All Grades
Description:	This ML Level 1 course introduces students to language and concepts necessary to communicate information, ideas and concepts necessary for academic success in social studies. The topics of study will include geography and world history, and draw from the cultural backgrounds of the students. (IELD)
Course Title:	Language Acquisition for Math
Course Number:	1404
Prerequisites:	Placement testing, LAC recommendation
Credit:	2 Elective
Open to:	All Grades
Description:	This English language development course introduces students to the language and concepts necessary to communicate information, ideas and concepts necessary for academic success in math. The primary focus of this course is to help students build their foundational numeracy skills. The course includes such topics as: multiplication & division, fractions, exponents, introduction to variables, coordinate plane and plotting points. Topics will also include those that will be further examined in pre-algebra and other grade level math classes.
Course Title:	Language Acquisition for Science
Course Number:	1506
Prerequisites:	Placement testing, Language Acquisition Committee Recommendation
Credit:	2 Elective credits
Open to:	All Grades
Description:	This ML Level 1 course introduces students to language and concepts necessary to communicate information, ideas and concepts necessary for academic success in Science and health classes. Topics will include those that will be further examined in physical and life sciences. (IELD)
Course Title:	Academic Language (Semester 1 or Semester 2)
Course Number:	1171 and 1172
Prerequisites:	Placement testing, Language Acquisition Committee Recommendation
Credit:	2 Elective* credits
Open to:	All Grades
Description:	This course supplements bridging multilingual students who are taking a mainstream English course. It is added as a required language development course for students who have not yet passed the ACCESS test with a 4.5 or higher composite score. <i>*English credit may be retroactively awarded after passing English 1, 2, 3, or 4.</i>
Course Title:	ML Foundations of Literacy - Beginning
Course Number:	1148A, 1148B
Prerequisites:	Language Acquisition Committee Recommendation
Credit:	2 Elective credits per semester
Open to:	All Grades

Description: This two-semester class is for students working on foundational literacy skills at the phonetic level. This course is primarily for students with significant interruptions or limited formal education (SLIFE) *who are at the beginning stages of acquiring English*. Students must be specifically recommended by the Language Acquisition Committee. (IELD)

Course Title: ML Foundations of Literacy - Intermediate
Course Number: 1148IntA, 1148IntB
Prerequisites: Language Acquisition Committee Recommendation
Credit: 2 Elective credits per semester
Open to: All Grades

Description: This two-semester class is for students working on foundational literacy skills at the phonetic level. This course is primarily for students with significant interruptions or limited formal education (SLIFE) *who also have developed conversational or possibly academic level oral English skills*. Students must be specifically recommended by the Language Acquisition Committee. (IELD)

DHS Alternative Education Program (AEP)

Mission: To provide meaningful learning experiences for our students' lifelong success

Website Link: <https://sites.google.com/view/deeringaep/home>

The Alternative Education Program is designed for students in grade 9 through 12 who might be behind in school credits and who need credits to "catch up" in order to graduate with their class. AEP uses a strength-based approach, and students interested in the program are encouraged to see their school counselor, social worker or assistant principal for a referral to the program. Entry into AEP involves a referral from a social worker, school counselor and/or Assistant Principal along with signing a contract which explains the program to each student.

Course Title: AEP Humanities (11-12)
Course Number: 6553
Prerequisite: Nomination and Selection by Student Support Team
Credits: 2 English and 2 Social Studies credits
Open to: All Grades

Description: AEP Humanities studies is a semester-long course investigating various relevant social issues through the lenses of history and literature. This is a student-centered class that incorporates and connects to concepts explored in our STEM course. The idea is to teach students the interconnectedness of our world, which contributes to our well being as people working towards defining our goals and completing high school.

Course Title: AEP STEM (11-12)
Course Number: 6554
Prerequisite: Nomination and Selection by Student Support Team
Credits: 2 Science and 2 Math credits
Open to: All Grades

Description: AEP STEM studies is a semester-long course investigating various relevant aspects of Science and Mathematical thinking. This is a student-centered class that incorporates and connects to concepts explored in our Humanities course. The idea is to teach students the

interconnectedness of our world, which contributes to our well being as people working towards defining our goals and completing high school.

Course Title: AEP Humanities (9-10)
Course Number: 6551
Prerequisite: Nomination and Selection by Student Support Team
Credits: 1 English and 1 Social Studies credits
Open to: All Grades
Description: AEP Humanities studies is a semester-long course investigating various relevant social issues through the lenses of history and literature. This is a student-centered class that incorporates and connects to concepts explored in our STEM course. The idea is to teach students the interconnectedness of our world, which contributes to our well being as people working towards defining our goals and completing high school.

Course Title: AEP STEM (9-10)
Course Number: 6552
Prerequisite: Nomination and Selection by Student Support Team
Credits: 1 Science and 1 Math credits
Open to: All Grades
Description: AEP STEM studies is a semester-long course investigating various relevant aspects of Science and Mathematical thinking. This is a student-centered class that incorporates and connects to concepts explored in our Humanities course. The idea is to teach students the interconnectedness of our world, which contributes to our well being as people working towards defining our goals and completing high school.

Course Title: AEP WELLNESS
Course Number: 6557
Prerequisite: Nomination and Selection by Student Support Team
Credits: 2 Physical Education and 1 Health credits
Open to: All Grades
Description: AEP Wellness is part of the Alt Ed curriculum. This course helps students understand their social emotional health and the mind-body connection. AEP Wellness provides students the opportunity to set individual fitness goals and to practice wellness activities like yoga & mindfulness. We also partner with Portland Public Health Division and Through These Doors to provide information on issues that are relevant to healthy adolescent growth. The course is full year and provides 2 PE credits and 1 Health credit. It is a pass/fail course.

Course Title: AEP ELECTIVES
Course Number: Varies
Prerequisite: Nomination and Selection by Student Support Team
Credits: 1 Elective Credit
Open to: All Grades
Description: AEP Electives may include **School Connect, Mind over Matter, and Habits of Mind (6514)**: These programs are co-taught with a school social worker. Each course incorporates social emotional support with life skills training.

Community Programs

Jobs for Maine Graduates (JMG)

JMG partners with public education and private businesses to offer results-driven solutions to ensure all Maine students graduate, attain postsecondary credentials and pursue meaningful careers. Their mission is to identify students who face barriers to education, and to guide them onto a successful path toward continued education, a meaningful career, and productive adulthood.

Course Title:	JMG 1
Course Number:	6601
Prerequisite:	Application and Interview with JMG Specialist
Credit:	2 Elective credits, semester long
Open to:	All grades
Description:	<p>The JMG high school core program is offered in partnership with public schools, as a for-credit course. The primary objective of the core program is to keep students fully engaged in high school through graduation, leading to enrollment in post-secondary education, a continued education credential or training program, or a quality job with a career pathway. Some features of our high school program include:</p> <ul style="list-style-type: none">■ Learning about critical skills in leadership, teamwork, written communications, public speaking, time management, personal finance, work habits, and career development.■ Participating in community service and philanthropic components, learning about the importance of good citizenship and giving back.■ Participating in the JMG Career Association, a student-led organization that offers additional opportunities to create a sense of belonging and to put skills into action.■ Day and overnight field trips that include business tours, college tours, community service projects, the Leadership Education Conference at Pine Tree Camp, and the Career Development Conference at Thomas College.

Course Title:	JMG 2 - School to Work Program
Course Number:	6602
Prerequisite:	Completion of JMG 1, and application and interview with JMG Specialist
Credit:	2 Elective credits
Open to:	Grades 11 - 12
Description:	<p>Jobs for Maine's Graduates is offering workplace learning opportunities that aims to connect students to real-world experiences in the workplace and their communities. This program provides valuable employer connections, on-the-job training, and cooperative education agreements designed to prepare students to enter the job market and to be successful after graduation. Work placement learning opportunities include informational interviews, business tours, job shadows, practicums, mentorships, internships, and school-to-work agreement. Specialists can also work with students to find job opportunities that provide students a chance to extend classroom learning into a workplace setting. Strong partnerships with employers will facilitate connections between students, educators,</p>

businesses and community leaders to extend education beyond the school's physical boundaries and traditional times. Student-centered approaches to learning customize the educational experience to each student's needs and interests.

Extended Learning Opportunities

Course Title:	Extended Learning Opportunity
Course Number:	None
Prerequisite:	None
Credits:	0-2 Elective credit
Open to:	All Grades
Description:	We believe that students should be invested in finding opportunities such as internships and community-based volunteer projects in order to develop their career-readiness skills. If a student wants to earn credit for an extended learning experience, the student must submit an independent study form with their school counselor and the plan must be approved ahead of time by the school counselor and school principal. Students should track their hours via a google doc so school counselors can verify the hours. Students must complete 45+ hours of service to receive credit in the following categories: community service, internship, or extended job shadows.

Student Support Services

The Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004) is a Federal law which mandates a free and appropriate public education for students with disabilities. Maine Special Education Regulations define a student with a disability as having one or more of the following diagnoses: autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech and language impairment, traumatic brain injury, visual impairment including blindness.

Students with a disability are identified through a referral system and an Individual Education Program (IEP) process. Referrals may be made by parents or teachers who have reason to believe that the student may have a disability which requires special education services. Students may also refer themselves. Parents are notified when a referral has been made, and parental consent is required before any special education evaluation or service is provided.

Deering High School provides a continuum of special education placements in order to meet the needs of students with disabilities. Supportive services such as physical therapy and occupational therapy are available whenever such services are required to assist a student with a disability to benefit from special education services. Academic success, emotional growth, and life skills are the focus of the high school special education program, with the goal being a smooth transition from high school to the adult world.

Any questions regarding special education can be directed to your child's special education case manager, the school principal, or to the Director of Student Support Services.

STUDENT SUPPORT SERVICE CONTINUUM:

Case Management:

A case manager is a licensed teacher or related service provider who is a member of the IEP team and is responsible for coordinating instruction and related services for the student. The case manager will coordinate the delivery of special education services and will be the primary contact for the parent.

Academic Support:

Academic support is designed to help students succeed in their required academic courses by providing additional instructional time and subject-specific learning strategies for students who need the extra assistance. Academic support may also provide opportunities for students to work on homework and supplemental assignments to practice their academic skills. An academic support class is considered a companion course to a required academic course.

Behavioral Support:

Behavioral supports are provided for those students with a behavior plan or behavior goals and are outlined on their Individualized Education Plan.

Consultation:

Consultation support is a means by which a special education teacher consults with a teacher of a student with an IEP about the abilities of the student, appropriate classroom materials, and strategies for working.

Instruction with Accommodations:

Instruction with accommodations are changes in assessment and/or instruction which do not fundamentally alter or lower a standard or performance indicator. Students with Individualized Education Plans may benefit from accommodations tailored to their individual needs.

Modified Instruction:

Modified instruction is instruction that fundamentally alters the standard of a course, measurement topic, or test. Modified instruction for individual learners is based on evidence that the student has been provided appropriately accommodated instruction and their progress and past achievement demonstrates the need for modified course requirements. The team of educators responsible for the student's Individualized Education Plan would determine the extent and breadth of modifications to a standard, specifying additional supports, reduction in quantity and/or complexity of learning targets, and extended timelines for completion.

Practical Level Instruction (specially designed instruction in a special education setting):

Students with IEPs who are 3 or more grade levels behind in content areas receive small group direct instruction by a special educator in a special education setting. Curriculum uses modified standards and learning targets from earlier grades, moving students toward grade level standards and targets when possible and appropriate.

Functional Academics (specially designed instruction in a special education setting):

For students with moderate special needs who require a functional academic curriculum that focuses on skills in math, reading, writing, science, and social studies needed to access the community around them.

Functional Life Skills (District Program):

The Functional Life Skills program teaches functional skills and activities for students ranging from ages 14-20 with severe and profound special needs. To be functional, skills and/or activities must be appropriate for the learner's

chronological age, be taught and used at the appropriate time and place, and contribute to present and future independence of the learner. Instruction is provided in school and non-school settings (such as neighborhood parks, stores, and the student's own home), in order to teach the skills a person needs to be independent in those settings. Areas of programming include vocational, community, domestic, leisure, educational, activities of daily living, communication, and social skills. As students approach graduation, links are made with community based adult services to insure continuing support after high school.

**Students with severe behavioral and significant safety needs requiring 2:1 or more Teacher/Student support are not appropriate for this program. Currently, there are medically fragile students in the program who can be adversely impacted by the level and severity of students with behavioral and safety concerns.

RELATED SERVICES Per IEP (Individualized Education Plan):

Speech and Language Services

The speech therapist evaluates and provides therapy services to students with speech and language needs. Students receive help for problems with articulation, receptive and expressive language, social language skills, fluency, hearing impairment, and augmentative communications. Speech services, goals and objectives are outlined in the student's IEP.

Occupational Therapy Services

Occupational therapists administer and interpret the tests and observations used to evaluate fine and gross motor control, sensory-motor integration levels, perceptual motor performance, neurodevelopmental status, and skills of daily living. Evaluation data are used to identify and remediate specific physical, behavioral, and developmental needs that adversely impact an identified student's ability to make adequate progress in school. Occupational therapy services, goals and objectives are outlined in the student's IEP and are integrated into educational and daily living activities whenever possible.

Physical Therapy Services

The physical therapist provides evaluation, consultation, and direct services to students who have physical handicaps, which interfere with functioning in the educational setting. Areas of student need may include dependence in mobility, need for alternate or adapted positioning, or need for adaptive or prosthetic equipment. Physical therapy services, goals and objectives are outlined in the student's IEP.

Social Work Services

Social workers provide a connection between school and home, network with community support services and consult with staff to clarify students' needs. Social workers provide individual and small group counseling in addition to providing risk and substance abuse assessments. Social Workers also provide prevention efforts in the areas of suicide prevention, substance use and mental health issues. The Social Workers are very knowledgeable about community resources and crisis services in the community.

Psychological Services

District psychologists administer diagnostic evaluations, serve as behavior management consultants and lead social skills training groups.

Transition Planning per IEP (Individualized Education Plan)

Every student with an IEP has a transition plan beginning at age 14. This student centered plan identifies post high school goals and establishes yearly activities leading toward those goals. Links are made with community support services, vocational planning resources, independent living resources and post high school educational

opportunities. This plan is the cornerstone of each IEP meeting and a focused reminder to students that there is a meaningful link between accomplishment in school and achieving life goals after high school.

Portland Arts and Technology High School (PATHS)

Portland Arts & Technology High School (PATHS) is open to all students in grades 9-12. PATHS courses are designed for all students who are serious about gaining new skills and knowledge through applied “minds-on/hands-on learning”.

These classes are designed for career bound and college (post-secondary) bound students and are an extension of their high school schedule. PATHS classes count toward graduation as elective credit. Classroom theory and instruction, extensive labs, shop projects and community-based internships combine to give students real life experience in career directions. Although all PATHS classes are two years in length, some PATHS classes offer introductory “Semester Classes” or one year opportunities.

PATHS follows the Portland Public Schools calendar and offers two sessions a day:

Session 1 (8:00 - 10:25 AM) and Session 2 (11:00 AM – 1:30 PM). Students are bussed to and from PATHS by their sending school.

Students who complete a yearlong PATHS program earn six (6) Elective credits toward graduation. Students who successfully complete a two-year sequence of an approved program may be eligible for Integrated Studies credit. Sending schools can award an Integrated Credit (Math, Science, Fine Arts) as part of the Elective credit - not as additional credit. Students interested in receiving integrated credits should talk with their PATHS teacher and their School Counselor.

NOTE: All PATHS programs follow national curricula standards and have been aligned with the Maine Learning Results (MLR).

VISITOR & APPLICATION PROCESS

Students who are interested in taking a course at PATHS must visit the specific program. Your School Counselor will arrange a visit for any student interested in PATHS.

Parents, School Counselors, and Teachers are always welcome to visit PATHS.

PATHS Course Descriptions

Automotive Collision Technology

Course Number: AC

From damaged to dynamic! Learn the skills necessary to bring that automobile back to showroom condition. Students will learn the skills necessary to use a frame machine, spray guns, and some of the state-of-the-art techniques like adhesive panel replacement, paint blending and specialty paintwork like striping and flaming. Basics in welding, wiring, front end alignment and basic mechanics will also be covered. Through their affiliations with national paint companies and curriculum developers students will have the opportunity attend seminars and workshops. Career Opportunities: Auto Collision Technician, Frames Specialist, Refinish technician, Refinish Prep Specialist, Insurance Estimating, and Paint Mixing Specialist.

Automotive Technology

Course Number: AT

The Automotive course provides students with skills to develop a thorough understanding of the design, construction, and operation of automotive systems. During their two-year involvement with this program, students are taught how to troubleshoot, service, and repair modern automobiles. Using the most up-to-date technology available these students are prepared to face the challenges of today's auto industry needs. National affiliations with the Ford Skills Competition, AYES and ongoing placement opportunities with local dealerships provide practical skill development. Preparation of students for employment and postsecondary education are major goals. Dual Enrollment with SMCC & CMCC enables students to earn college credit while at PATHS.

Career Opportunities: Mechanic, Diesel Mechanic, Brake Specialist, Service Writer, Parts Specialist (Dual enrollment with CMCC).

Biomedical & Health Science

Course Number: HE

The first year introduces the students to careers in health sciences and students may choose from three different tracks: nursing, dental, and veterinary. Students study anatomy, physiology, nutrition, diet therapy, and complete a medical research project through field trips, demonstrations, and classroom instruction. The second year prepares the student in basic health science skills, body mechanics, aseptic techniques, and medical terminology. Students are placed in clinical experiences of their choice during the second semester. The Health Science Careers Program also serves as a foundation for further education in a technical school or college.

Year 1: Principles of Biomedical Science (first semester)

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

Human Body Systems (second semester)

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis in the body. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases

Year 2: Medical Interventions

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

Articulation Agreement with SMCC.

Career Opportunities: Personal Support Specialist (P.S.S.), Certified Nursing Assistant (C.N.A.), Dental Aide, Veterinary Aide, Physical Therapy Aide, Rehabilitation Aide, and many other health science careers. This class meets the State Requirement for certification as a Nurse Assistant.

Carpentry

Course Number: CA

Is the construction industry calling you? Start this exciting career at PATHS. Students are introduced to the many opportunities in the field of carpentry: you will learn how to build a house from the foundation through framing

and into finish work.. Proper and safe use of hand and power tools is taught. Students will use the latest tools, materials and techniques when building individual or group projects. Students can receive certification (license) to operate a forklift truck as part of the Carpentry program. Preparation of students for employment and postsecondary education are major goals. Articulation Agreement with CMCC.

Career Opportunities: Rough or Finish Carpenter, Carpenter's Helper, Roofing, Siding & Insulation Contractor, Drywall Installer, Lumberyard worker or building material sales.

Commercial & Advertising Art

Course Number: CD

The goal and purpose of commercial art at PATHS is to help students learn how to make and market their art to generate income. Building a strong portfolio and setting up art exhibits to show and sell work is ongoing. Students learn how to effectively create layout and design for posters, logos, illustrations and tee shirts by hand and computer. Each year students will participate in competitions and have their work exhibited at various locations in the community. A weekly sketchbook is mandatory as well as constructive critiques of student work. This class is a great opportunity to learn how to strengthen art and computer skills while demonstrating creativity.

Career Opportunities: Designer, illustration, art shows, and graphic artist.

Culinary Arts

Course Number: CC

The Culinary Concepts program is designed as a 2 year intensive that prepares the student for immediate entry into the exciting world of culinary professionals. Portland, Maine is one the richest cities in the country for dining out. World class chefs and restaurants are plentiful, and they are always looking for quality employees. This program will have you ready to apply for those jobs with confidence. If you are a people person and want to work in a dining room, we also cover table service by providing customer service opportunities in our own dining room, serving meals to be eaten in or take out. Many people work their way through college by waiting tables. This program will ensure you know what you are committing to and how to earn top gratuities with grace. Not ready for that level of intensity? The Culinary Concepts program dovetails nicely with all the Culinary Arts colleges, public and private, even offering college credit at some of them. A nationally recognized ServSafe certificate can be achieved with a passing score on the exam. Perhaps restaurant work and culinary schools are not your thing. This class will provide you the base from which you can branch out into writing a food blog or restaurant and product reviews, become a food photographer, or sales person. Maybe you like equipment. Knowing your way around a professional kitchen will give you the edge when it comes to knowing what chefs want and need to round out their kitchen tools. Have an idea for a product? Entrepreneurship is a major component of what we do here also. Developing menus and playing with recipes and marketing strategies, so you can open your own business! Overall, the Culinary Concepts program has a broad brush approach to prepare you for a future in the potentially lucrative and exciting food service industry. Once you know your way around a restaurant, you can travel anywhere in the country, and beyond, and find work.

Career Opportunities: Cook, baker, chef, pastry chef, restaurant manager, food buyer, food sales, butcher.
(Articulation Agreement with CMCC)

Cybersecurity

Course Number: CYB

This program is an introduction into the exciting world of careers in Cybersecurity. This program will take you in many directions highlighting roles as an analyst, penetration tester, systems administrator and computer crime investigator. You will learn priceless skills in this program to help keep you, your family and eventual employer safe on the internet for many years to come. The program will be a constantly evolving experience starting with the basics of security but also studying current and evolving threats facing the real world security landscape.

Collaboration and teamwork will be critical to the success of a student in the program. Career Opportunities: security consultant, ethical hacker, information security analyst, and more.

Dance

Course Number: DA

The Arts Academy Dance Program is a modern dance based program for high school students interested in pursuing a professional experience in the performing arts. Students take daily technique classes in modern dance and ballet technique as well as hip hop, choreography, dance composition, and improvisation. Students are exposed to a wide range of professional guest artists and other styles of dance throughout the school year in the form of one day workshops or special projects including jazz dance, Musical theater, West African dance and drumming, Sculpture and Dance, Theater, Yoga, Capoeira, Salsa. Since the Arts Academy Dance Program is a performance based program, students perform several times throughout the school year in our black box theater space at PATHS and at other venues and events in the community such as the PATHS annual Fashion Show. Students attend concerts and workshops with professional touring dance companies each year in Portland and Boston through partnerships with Portland Ovations and MELMAC. The Arts Academy Dance Program is the only comprehensive dance program for high school students in the State and is aligned with National Common Core Standards for Dance, National Standards for Dance Education, and the Kennedy Center Standards for Dance Education. Community Partnerships and Advisory Board members include David Reese and Falmouth Physical Therapy, Bowdoin College Department of Theater and Dance, USM Dance Faculty, Portland Ovations. Interested students must schedule an initial first visit through their guidance department. After the initial visit, prospective students must return to participate in an audition - class, which is scheduled in the early Spring. Students of all levels are encouraged to visit and apply to the dance program. Successful candidates are serious, mature individuals who are interested in a collaborative, rigorous experience.

Careers in Education

Course Number: ECO

The Careers in Education program is designed for students contemplating a career as a teacher or in any occupational area that focuses on children. Students will acquire the knowledge, attitude, behaviors and skills required to be effective in a school setting or in the wider community. Through partnerships with SMCC and Educators Rising, students will explore careers such as teaching, social work, and specialized therapy (occupational therapy, speech therapy, and developmental therapy). The program offers practical experience in our on-site, public pre-kindergarten classroom in which classroom instruction is applied in a real situation. Students will also learn about the art and science of teaching, educational philosophies, stages of development, curriculum planning, observation and assessment, and partnering with families. Students will be expected to participate daily in our on-site pre-kindergarten classroom, complete weekly written performance reflections, perform weekly child observations, create lesson plans and learning materials, and create a professional portfolio. The program offers students completing the two-year sequence of study an opportunity to explore various levels of teaching through internships.

Career Opportunities: Teacher, Child Development Center or Head Start, Nanny, Nursery School Teacher, Therapeutic Aide. Career Paths: Education, Social Work, Family Care.

Food Services

Course Number: FF

The Food Service Program prepares students for entry-level employment in the food service industry. This exciting program offers real life experiences and learning through the operation of a student run café. Students receive a varied hands-on education in food preparation, equipment usage, sanitation, personal hygiene, customer relations,

teamwork, attitude, initiative, and independence. Students are supported to meet their needs with a focus on building self-confidence, independence, and collaborative working skills.

Career Opportunities: Prep Cook, Wait Person, Dishwasher, Cashier, Clerk, Sandwich Prep, Fast Foods Worker

Horticulture

Course Number: LG

The Horticulture program is designed to expose students to the varied jobs in the “Green Industry”, including landscaping, greenhouse productions, hydroponic and outdoor vegetable and fruit production, floral trades, and retail sales. The learning environment includes a 3,000 square foot greenhouse, as well as a 40 acre campus. Students will work with display beds, gardens, orchards, hydroponic systems and the extensive grounds of our campus. Practical greenhouse, landscape, and garden techniques are taught in a collaborative environment. Students who complete the program can further their education or enter into the workforce as a nursery/greenhouse worker, sustainable agricultural worker, gardening crew member and more.

Marine Service

Course Number: RMR

Marine technology is a two-year program offering many opportunities for students to find their interests in one or more skill sets in the field. A willingness to learn, good attendance and a positive attitude are necessary for success. The primary focus of this program serves as an entry level to many post secondary education and employment opportunities for marine repair facilities, boat yards, boat builders and yacht services. This course is designed to teach the necessary theoretical and practical skills to prepare and educate individuals to become competent marine technicians with career readiness skills and an aptitude for the industry. Students will gain the ability to diagnose, repair, install and rebuild multiple marine systems, inboard and outboard engines, diesel engines, AC & DC electrical, marine electronics and composite boat building and repair. Highly motivated students have the opportunities to receive multiple certifications and intern opportunities with local boatyards and repair facilities. Each section of the program includes a large portion of shop time in order to strengthen the student’s hands-on skills.

Year I: Small Engine: Shop safety, tools & measurements, fasteners & sealants, engine construction, theory & operation of 2-stroke & 4-stroke engine, small engine maintenance, troubleshooting, repairs, rebuilding, carburation, ignition systems, lubrication systems, cooling systems, customer service skills, basic DC electrical theory & installation, battery systems, introduction to marine composites & coating

Year II: Marine Systems: Customer service skills, introduction to boat handling & safety, outboard & inboard engine maintenance, troubleshooting & repair, advanced DC electrical theory, troubleshooting & installation, fuel injection systems, marine diesel & support systems, marine electronics installation & troubleshooting, marine composite repairs & coatings, seasonal maintenance & shrink wrapping

Career Opportunities: Small engine mechanic in motorcycle, snowmobile, ATV or boat businesses; general work in boat yard; fiberglass boat repair.

Masonry

Course Number: MA

Fireplaces, barbecue pits, steps, planters, and columns for lighting applications are only a few of the projects you’ll undertake in this exciting program. Design and layout of projects using brick, block, dry stone (wall construction), decorative pre-cast concrete, and repair of existing masonry structures are all part of the skills you’ll acquire.

Students are instructed in shop and job safety practices and procedures. Students receive related instruction in blueprint reading, layout work, measurement, sketching, and estimating.

Career Opportunities: Mason, Mason tender, Bricklayer, Contractor, Tile Setter.

Music

Course Number: MU

The Music Program at PATHS opened its doors to high school students interested in the study of performing arts in 1999 under the name of *The Arts Academy*, comprised of the music program and a modern dance program, where it received local and national support. Many interested Greater Portland residents and the Maine Commission for the Arts helped create an environment for highly focused and individualized study. In this two-year music program, you will learn how to interpret and perform many contemporary musical styles from Rock to R&B, Pop to Jazz and Funk. There are three aspects of the program: Performing, Music Theory, Recording Studio. Students perform four times a year, with one evening Rock Show off campus. Students will record each other to create an Album. You will also study music theory, arranging, songwriting, and the ins and outs of the music business. Upon completion, you will be able to start your music career, or take your education up an octave by getting your bachelor of music degree from a college or university. The audio engineering component of the music program is unique in its approach to introducing students to recording, mixing, music production and live sound. Students receive instruction in recording, mixing, editing, a foundation in the physics of sound and electricity, and an in-depth survey of popular music fundamentals. With plenty of hands-on opportunities, students learn engineering techniques with cutting edge ProTools software.

Career Opportunities: Performer, Music Educator, Composer, Songwriter, Music Producer, Audio Engineer, Recording Engineer, Sound Mixer, Digital Workstation Editor, Post Production Engineer, Mastering Engineer, MIDI Engineer, Music Scoring (Studio Manager, Music Video Production, Special Event Lighting/Sound Presentation, Digital Video, Sound Design).

New Media

Course Number: NEDA

Our world is moving faster every day and media production for the Web or TV is a powerful force within it. From Adobe Photoshop and Flash to Panasonic and Sony, the New Media program at PATHS introduces students to the basics that all new media producers need. Students are prepared for career or college with an individualized curriculum designed by our staff. Every student will master the basics of graphic design, project design and management, shooting and editing video, and Adobe PhotoShop. Then our staff will work with each student to create a customized program for more advanced study. Whether a student is planning on a college career, an apprenticeship, immediate entry into the workforce, or any of these combinations, the New Media program will prepare that student to be successful. Introductory topics in New Media include Photoshop, Concepts in Graphic Design, Project Design and Management, and Introduction to Video Creation and Editing. Advanced Topics include Broadcast Programming, Concert Sound Production, Script Writing and Animation, and more.

Plumbing and HVAC

Course Number: PL

Plumbing & Heating is a two year program providing instruction in all phases of repair, maintenance, and installation of plumbing and heating equipment. One year of the program is spent in the plumbing lab learning to work with all types of pipes, joints, traps, fixtures, tanks, and pumps. In the other year, students study three types of oil heating systems: warm air, steam, and hot water. Students will be involved in the practice of installation, maintenance, and adjustment of equipment, as well as the wiring of the electrical components of oil burners, including troubleshooting, testing, and adjusting. Both years use a nationally recognized curriculum with a national registry for qualified students. Graduates have basic entry level skills to enter the workforce or attend technical schools in HVAC, Plumbing, and Heating.

Career Opportunities: Plumbing and heating contractors, maintenance workers, plumbing and heating warehouse workers and salespersons. Additional training and licenses may provide opportunities as supervisors or operators of related businesses.

Welding

Course Number: WE

This course includes instruction in the safe operation of oxygen/acetylene gas welding, brazing and cutting. The first year students will be taught Shielded Metal Arc Welding (S.M.A.W.), Flux Core Arc Welding (F.C.A.W.), and Gas Metal Arc Welding (G.M.A.W.). Second year students will be involved in projects that will include but will not be limited to: utility trailers, snowmobile trailers, landscape trailers, various metal craft projects by your own design, and outside projects for individuals or schools. First and second year students will have the opportunity to attempt the structural plate test limited to $\frac{3}{4}$ inch thickness after they have proven their basic proficiency in the S.M.A.W. process. Pipefitting and pipe welding techniques will be taught, which will include Gas Tungsten Arc Welding (T.I.G.), 5P root and 7018 to cover. Carbon Arc Cutting, Plasma Arc Cutting and Aluminum Welding will also be introduced. Basic math computations including addition and subtraction of fractions, converting decimals to fractions and basic Geometry will be taught. Blueprint reading and sketching will be practiced regularly. Articulation Agreements and dual enrollments with SMCC and EMCC.

Career Opportunities: Certified Welder, Welder's Helper, Pipefitter, Fabrication Shop Specialist operating automated cutting and welding equipment, owner/ operator of welding/metal fabrication shop, Quality Control Weld Inspector. The opportunities in the steel trades are endless.