Introduction to the Program of Studies

The Program of Studies is designed to assist students in planning their academic program at Falmouth High School. Course selections should be made carefully and as part of a four-year plan designed to meet post-secondary goals. It is important that students discuss their program and courses with their parents, teachers, advisors, and counselors. Special attention should be given to the course descriptions, course levels, prerequisites, and the amount of credit given per course. Each student is required to carry at least six (6) academic credits each semester. The goal of this process is to encourage students to take courses that provide the greatest opportunity for both challenge and success. This will provide students with maximum options in post-secondary placement.

SCHOOL COUNSELING SERVICES

FHS school counselors provide a wide range of services for students, including academic advising, personal counseling, career interest surveys, test interpretations, and college planning and career counseling. Students are encouraged to visit the Student Services Office for support and assistance whenever they are faced with educational, vocational or personal issues and decisions. See our school counseling website for further information about services offered.

GRADUATION REQUIREMENTS

All students will demonstrate proficiency in the content-area graduation standards of the Maine Learning Results.

All students must complete 30 hours of Community Service, with at least 20 hours completed by the end of the junior year. Students who transfer to Falmouth High School are required to complete 7.5 hours for each year of attendance at FHS. Please Note: Due to COVID and moving to remote learning Spring 2020, the Class of 2021, Class of 2022, Class of 2023 have a reduction of their community service requirement by 7.5 hours, therefore these classes have a 22.5 hours obligation.

All students must complete the Senior Discovery program requirements and submit an application to a post-secondary educational institution, training program, military or other life experience.

To earn a diploma from Falmouth High School, students must complete the following:

- 4 English credits
- 3 Mathematics credits
- 3 Science credits
- 3 Social studies credits (U.S. History is a requirement)
- 1 Fine Art credit
- .5 Health credit
- 1 Physical Education credit

It is the responsibility of each student to make certain that all requirements for graduation are met. School counselors and the administrative staff will make every effort to ensure that students are scheduled properly, but each student must be responsible for progress toward his/her diploma.

MULTIPLE PATHWAYS TOWARDS GRADUATION

Falmouth High School offers multiple learning options that allow students to demonstrate proficiency on expected learning standards and satisfy graduation requirements. A Multiple Pathway will be approved by the school unit in an individual student plan. Learning options may include, but are not limited to, the following:

- Dual enrollment or early college courses
- Career and technical education
- Accredited online learning programs
- Alternative or at risk programming
- Apprenticeships, internships, field work or exchange experiences

GRADING SYSTEM

A+: 100	B+: 90 - 92	C+: 82 - 84	D+: 75 - 76	F: 0 - 69
A: 96 - 99	B: 87 - 89	C: 79 - 81	D: 72 - 74	WP: Withdrew passing
A-: 93 - 95	B-: 85 - 86	C-: 77 - 78	D-: 70 - 71	WF: Withdrew failing

GRADE POINT AVERAGES

The GPA reflects a student's overall average in all numerically graded courses. The final grades in honors, Advanced Placement, and college level courses are weighted by 4% for calculation of grade point averages. The GPA on student transcripts reflects the weighted average. The GPA is calculated for the first time at the end of the sophomore year and then at the end of each semester thereafter.

When a student fails a class, it is his/her responsibility to address that failure. For most courses, retaking the course in the following semester or year, if required, can make up the failed course. Since four years of English are required for graduation, make-up of a failed English class should be arranged through the student's school counselor for an approved summer school or summer tutorial program.

HONOR ROLL

To be eligible for the honor roll, a student must be enrolled in a full academic program. A student will qualify for high honors if an A is received in each subject. A student will qualify for regular honors if an A or a B is received in each subject. The honor roll will be published each semester.

THE COURSE SELECTION PROCESS

The course selection process involves a balancing of student requests, teacher recommendations, parent preferences, and course availability. Many courses have prerequisites for the next sequential course, and it is important for the student to check with the teacher to see if he/she has satisfied the prerequisites for the next course. As a general rule, a minimum of a C average is required in order to move to the next level. Placement in honors courses requires a desire on the student's part to explore a topic in greater depth and a commitment to extra time and effort. Elective courses are scheduled based on student interest and availability.

SCHEDULE CHANGES

The add/drop period lasts for the first five school days of the first marking period of the course (fall or spring semester). During the first five school days, students may add and drop classes without an add/drop form. It is necessary, however, to meet with the guidance counselor in order to accomplish this.

After the first five school days of the first semester of the course, students wishing to add or drop a course are required to complete the add/drop form with the inclusion of the teacher's signatures, parent's signature and the school counselor's signature.

If the decision is to allow the student to add a course, the student will be required to demonstrate – to the satisfaction of the teacher – a mastery of previously assigned work in order to obtain full credit toward the course.

If the decision is to allow a student to drop a course, then this process must be completed before the midpoint of the first semester of the course. If the course is dropped after the midpoint of the first semester of the course, the grade will remain on the transcript and a W (withdraw) will appear for the semester.

ADVANCED PLACEMENT COURSES

Falmouth High School offers a variety of Advanced Placement (AP) courses. These courses give students the opportunity to take college-level courses while still in high school. Advanced Placement courses are rigorous and designed for students who wish to be challenged intellectually. Subjects are studied in greater depth and detail, with students expected to develop and support their arguments and perspectives. Development of writing skills, problem-solving techniques, and study habits essential for college academics provides an advantage to students successfully completing AP courses.

Advanced Placement courses currently planned for 2021-2022 at Falmouth High School include:

AP Biology

AP Calculus AB

AP Calculus BC

AP Chemistry

AP Comparative Government & Politics

AP Computer Science Principles

AP Computer Science A

AP English Language & Composition

AP English Literature & Composition

AP Environmental Science

AP European History

AP French Language & Culture

AP Human Geography

AP Physics 1

AP Physics 2

AP Psychology

AP Spanish Language & Culture

AP Statistics

AP US Government & Politics

AP US History

AP World History: Modern

AP exams are administered at school in May. Colleges and universities may award college credit and/or advanced standing through qualifying AP exam scores. This may allow students the possibility of moving into upper-level

courses. Several additional AP courses are available through <u>Virtual High School</u> and other online providers approved in advance.

POST-SECONDARY PLANNING AND COLLEGE ADMISSION REQUIREMENTS

Students should review their course of study throughout their four years of high school to ensure that they are well prepared and qualified to attend college, and to make their future college application as strong as possible. Colleges and universities vary greatly in their entrance requirements, and these may differ from those specified in the Falmouth High School Graduation Requirements. Many technical programs, community colleges and even some four-year colleges offer open admission, requiring only a high school diploma for entrance with no specification as to courses taken; students take a series of qualifying exams for placement into college courses. Conversely, the most selective four-year schools look at both grades and rigor of the program (the level of challenge in the course work), and evaluate students' transcripts based on both these factors. The transcript is, of course, only one part of the student's application, and many other factors are weighed, including extracurricular activities, personal statement (essay), teacher and counselor recommendation letters, personal qualities and the interview (if available). However, the transcript typically is the most important piece of the application. Most colleges' admissions requirements fall somewhere between open admission and the most selective schools. The following is a general guideline to college admission requirements:

English

Virtually all colleges and universities require four years of English. The more selective schools look for Honors or AP courses.

Mathematics

Three years of mathematics, including algebra I & II and geometry, is the <u>minimum</u> required by all four-year colleges, and many want a fourth year of math. Programs in areas such as engineering, business and computer science typically require a fourth year of math. College-bound students are strongly encouraged to take four years of mathematics. The more selective schools look for four years of math, and give more weight to calculus and other advanced classes, as well as honors and AP courses.

Science

Two years of laboratory science (beyond freshman science) are the <u>minimum</u> required by most four-year colleges, and many want three lab sciences (typically biology, chemistry and physics). The more selective schools want at least three years of lab science, and will look for Honors and AP courses.

Social Science

Most colleges look for two to three years of social sciences, with the more selective schools looking for four years of study and Honors and AP courses.

Languages

Two years of a foreign language – preferably the same language – are required by most four-year colleges. Three years of foreign language are preferred (with more weight given to three years of study of the same language). The more selective schools like to see four years of foreign language study (again, preferably the same language), and look for Honors and/or advanced and AP courses.

STANDARDIZED TESTING: REQUIREMENTS & RECOMMENDATIONS

All students take the PSAT in October of their sophomore and junior years at school (registration is not needed by the student), and all students take a state assessment in the spring of their junior year at school (registration is not needed by the student).

The ACT, accepted by virtually all colleges in place of the SAT, is another option for students to consider, particularly those who are not pleased with their SAT scores. For more information, go to www.actstudent.org or contact the Post-Secondary Counselor.

English

Students must earn four credits in English to graduate. Three of these credits must be earned by successfully completing year-long courses (English I, English II, and then Language, Power, and Rhetoric <u>or</u> AP English Language and Composition during junior year). The final credit may be earned by completing AP English Literature and Composition, AP English Language and Composition (if one has not taken it as a junior), <u>or</u> two semester courses in one's senior year. In addition to four core credits in English, semester courses may be taken for elective credit, though space may be limited.

ENGLISH I

Course#: 112 Grade: 9 Credits: 1

Freshman English continues to develop students' knowledge of literature, multi-paragraph analytical writing, grammar and usage, and SAT vocabulary. Students will read, discuss, and write about a wide variety of literature including short stories, poetry, drama, and novels. Instruction emphasizes reading critically and writing clear and well-developed paragraphs. Texts studied in English I may include *Adventures in Reading* (anthology), *Speak*, *Lord of the Flies*, *A Separate Peace*, *Romeo and Juliet*, and various self selected titles.

Prerequisites: None

ENGLISH I (Honors)

Course#: 111 Grade: 9 Credits: 1

Honors English I builds on the same concepts as English I, but the concepts are introduced at a faster pace using more challenging texts. A greater degree of independence and more in-depth analysis are expectations of the course. Honors English requires students to complete a summer assignment. Additional honors texts may include *The Odyssey, Great Expectations*, and/or *Fahrenheit 451*, as well as independently chosen titles.

Prerequisites: Student performance data from grade 8

ENGLISH II

Course#: 122 Grade: 10 Credits: 1

This course focuses on America's literary heritage through the study of texts from different periods in American history. Students read poems, essays and short stories from Adventures in American Literature (anthology) and novels such as *Of Mice and Men, The Great Gatsby, The Adventures of Huckleberry Finn* and *The Catcher in the Rye. Also recent poetry by Native American and African American authors*, *Crazy Brave (memoir)*, *and The Hate U Give (novel)* ... In addition, students will read plays such as: A Raisin In The Sun, *The Crucible, The Death of a Salesman* and *Our Town.* Students will extend their mastery of written and spoken English through frequent writing assignments and the study of grammar and vocabulary. The analytical essay will be the primary focus of the writing curriculum.

Prerequisites: Passing grade in previous year's English class.

ENGLISH II (Honors)

Course#: 121 Grade: 10 Credits: 1

This course examines issues and concerns explored in American literature, employing this examination to teach abstract analysis as well as oral and written expression. In addition to an anthology of short prose pieces and poems, students will read several longer texts. Teacher's selections vary, but titles are mostly drawn from the following list: *The Adventures of Huckleberry Finn, The Great Gatsby, The Crucible, Of Mice and Men, The Awakening, The Catcher in the Rye, The Death of a Salesman and A Raisin In The Sun.* Also we will read recent poetry by Native and African American authors along with *Crazy Brave* (memoir) and *The Hate U Give* (novel). Instruction will focus on writing clear, richly developed analytical, narrative and persuasive essays.

Prerequisites: Above average grades in previous honors English section, or teacher recommendation.

JUNIOR YEAR ENGLISH OPTIONS

Note: Juniors may choose between two year-long English courses: AP English Language and Composition <u>or</u> Language, Power, and Rhetoric. Both courses fulfill the requirement of the junior year English credit.

* Juniors may also sign up for semester courses, which would count as a .5 elective credit, but space is limited.

AP ENGLISH LANGUAGE & COMPOSITION

Course#: 1311 Grade: 11 Credits: 1

Advanced Placement English Language and Composition is an honors-level course designed to prepare students for the rigors of college-level reading, writing, and thinking. The course mirrors a college composition course, with a heavy emphasis on developing in students the ability to produce the sort of rich, complex writing that forms the basis of academic, professional and personal communication. In pursuit of this goal, students will read a broad range of texts, both fiction and non-fiction, which they will be expected to consider and synthesize in writing that moves beyond the formulaic five-paragraph essay into sophisticated prose driven by content, purpose and audience.

AP examinations are administered in May.

Prerequisites: Successful completion of English II

LANGUAGE, POWER, and RHETORIC

Course #: 1055 **Grade:** 11 **Credit:** 1

This course is designed to prepare students for the rigors of college-level thinking and writing with a heavy emphasis on student choice. Students will develop the ability to produce rich, complex writing that forms the basis of academic, professional, and personal communication. Students will read a broad range of texts (fiction and nonfiction, both current and classic), which they will be expected to discuss and synthesize in writing that moves beyond the formulaic five-paragraph essay into sophisticated prose driven by content, purpose, and audience. Additionally, students will design a student-based inquiry research assignment that will culminate in a formal presentation.

Prerequisites: Successful completion of English II

SENIOR YEAR ENGLISH OPTIONS

Note: Seniors may choose between AP English Language and Composition, AP English Literature and Composition, <u>or</u> two semesters courses to fulfill the requirement of the senior year English credit.

* Seniors may also sign up for semester courses, which would count as a .5 elective credit. Priority will first be granted to seniors taking semester courses for core credit.

AP ENGLISH LITERATURE & COMPOSITION

Course#: 131 Grade: 12 Credits: 1

Advanced Placement Literature and Composition challenges students at the highest levels to analyze and interpret complex literary texts and to compose clear and insightful analyses in response to the reading. Writing assignments will include on-demand writing, process writing, and response writing. This rigorous course will operate as a seminar and will require that students read, analyze and discuss sophisticated literature such as The Grapes of Wrath, Invisible Man, As I Lay Dying, and Frankenstein.

AP examinations are administered in May.

Prerequisites: Successful completion of English II

AP ENGLISH LANGUAGE & COMPOSITION

Advanced Placement Language and Composition is an honors-level course designed to prepare students for the rigors of college-level thinking and writing. Whereas AP Literature and Composition focuses specifically on the exploration of various literary genres, this course mirrors a college composition course, with a heavy emphasis on developing in students the ability to produce the sort of rich, complex writing that forms the basis of academic, professional and personal communication. In pursuit of this goal, students will read a broad range of texts, both fiction and non-fiction, which they will be expected to consider and synthesize in writing that moves beyond the formulaic five-paragraph essay into sophisticated prose driven by content, purpose and audience.

AP examinations are administered in May.

Prerequisites: Successful completion of English II

CREATIVE WRITING: POETRY

Course#: 1032 **Grades**: 9-12 **Credits**: 1/2

This course is designed to develop both the skills and the habits of poets. Daily reflective writing, sharing, drafting and revising of poems, workshopping, and publishing (both in print and performance) are all components of the curriculum. In order to inspire and support experimentation with a variety of writing strategies and techniques, students will explore the work of both page and performance poets, completing a series of response papers on poems of their choice. Students will compose a poem each week, ranging from traditional forms such as sestinas and sonnets, to free verse, to collaborative pieces. Great emphasis is placed on developing individual style and voice. Each student will publish a chapbook of their collected work as a final project.

Prerequisites: None

CREATIVE WRITING: FICTION (Storytelling)

Course#: 1043 **Grades**: 9-12 **Credits**: 1/2

Students will write stories in a seminar atmosphere while reading various selections: short stories, memoirs, dialogues/oral tradition, and other forms of telling stories. We will develop and practice a variety of writing strategies and techniques, such as characterization, plot, theme, and voice. Assignments will allow students to experiment and enjoy creating with various genres of writing, both fiction and non-fiction. Weekly assignments will culminate in a final project of a portfolio of student writing. Storytelling is arguably humanity's oldest art form—take this class to carry on the tradition.

Prerequisites: None

INTRODUCTION TO JOURNALISM

Course#: 1063 **Grades**: 9-12 **Credits**: 1/2

This course will introduce students to the basics of journalism, with a focus on writing (print). Students will learn about the history and current state of journalism, the practice of research, reporting, shaping stories, as well as the fundamentals of quality journalistic writing, layout and photography. Students interested in writing/editing for The Mast are encouraged to take this course.

Prerequisites: None

MEDIA STUDIES

Course#: 1575 **Grades:** 9-12 **Credits:** 1/2

Most of us read and experience far more news and media than we do classic literature. But how many of us ever really learn how to "read" the information we get? In a world where we are hit each day with a tsunami of information, how do we know what to trust?

This course focuses on helping students learn to read, understand, and analyze modern media. In this class students will learn the basic structures and patterns of how media relates news/information, the different forms media takes, how to recognize forms of bias and viewpoint, and how to draw out accurate information. Students will be expected to read, write, and share what they learn. This course will appeal to students interested in current events, journalism, modern media, reading, and writing.

Prerequisites: None

PUBLIC SPEAKING

Course#: 155 **Grades**: 9-12 **Credits**: 1/2

This is a semester course designed to prepare students for presenting a variety of oral projects. The focus of the class will be to provide students with the skills and confidence to feel they can speak in a variety of situations and settings. The presentations range from impromptus, children's stories, poetry readings, interpretive readings of well-known speeches, and a student written speech/presentation. Students will also thoroughly study interpersonal communication and the many different forums where speaking skills are needed. 80% of the grade will be performance based.

Prerequisites: None

SHAKESPEARE & YOU

Course#: 156 **Grades**: 9-12 **Credits**: 1/2

This is a class designed for students interested in studying and experiencing more of Shakespeare's plays. A major focus will be on how the characterization and the themes still relate to us today. We will focus on why the issues in these works continue to captivate us. Students will be expected to read and study 4-6 plays. We will look at the plays as performance based works. In other words, although we will read them, we will always keep in mind they are meant to be acted/performed. Students will be required to perform/interpret scenes as part of the class.

Prerequisites: None

MATHEMATICS

The Mathematics Department offers a wide variety of sequential courses. Students should select these courses according to their demonstrated performance in previous courses, teacher recommendations, their personal motivation, career goals / interests, and their mathematical aptitudes. Students requiring extra support in Algebra I and Geometry will be recommended for an appropriate math lab.

The honors mathematics curriculum is conceptually equivalent to a four-course, advanced placement sequence with very high expectations. Only students who have a special desire to be pushed beyond the routine and are highly motivated in mathematics should consider honors courses. Students enrolled in honors classes are expected to think creatively and to extend concepts beyond basic ideas with very little time spent on drill and practice.

An additional option for students in the honors program is participation in the Math Team. Honors students, starting in grade 9, are strongly encouraged to be active members of the Math Team. This activity exposes younger students to topics and techniques that will challenge them in future courses. Upperclassmen have an opportunity to stay current on all areas of math, not just those covered in their present math course. Participation in the Math Team provides students with a definite advantage in current and future math studies.

Graphing calculators are used in a variety of math courses. The math department uses and supports the TI-83/84 graphing calculator in their classroom instruction.

ALGEBRA: CONCEPTS & THINKING

Course#: 4031 **Grade**: 9 **Credits**: 1

The goal of this course is to provide each student with an opportunity to solidify their arithmetic and basic algebraic skills. We will be working towards giving every student the foundation needed to move on and be successful in high school Algebra. In the first half of the year we work on numeracy. Units in semester one include order of operations, fractions, percents, unit price, and unit conversion. The second semester introduces (at a basic level) the bigger concepts of Algebra 1 such as solving linear equations, properties of exponents, graphing (plotting points and finding slope).

Prerequisites: None

ALGEBRA I

Course#: 412 Grade: 9 Credits: 1

This course is a first year algebra course designed to build upon the student's understanding of basic algebraic concepts. The course focuses on linear functions, equations and inequalities, a basic understanding of functions, and systems of linear equations. In addition, the course includes an introduction to a variety of topics such as quadratic functions and statistics which are then explored in more depth and detail in Geometry and Algebra II. Applications of concepts are included throughout the course in order to offer a concrete learning experience.

Prerequisites: None

ALGEBRA I (Honors)

Course#: 410 Grade: 9 Credits: 1

This is a first-year accelerated algebra course designed to build upon, and enrich, the student's understanding of basic algebraic concepts. This course will look at algebra from a concrete, problem-solving approach. Students will solve equations and inequalities, and make graphs of families of functions (linear, quadratic, absolute value). Students will explore basic statistics by analyzing data to make informed decisions. Success in this fast-paced course depends on grit, self-advocacy, diligent effort outside of class hours.

Prerequisites: Teacher Recommendation

GEOMETRY

Course#: 422 Grades: 10-11 Credits: 1

This course covers the basic concepts of Euclidean geometry, including some introductory proof writing. Also included are other topics such as coordinate geometry, right triangle trigonometry, and area and volume of two- and three-dimensional shapes and objects.

Prerequisites: Successful completion of Algebra I or approval of the department.

GEOMETRY (Honors)

Course#: 420 **Grades**: 9-10

9-10 **Credits**: 1

The core content of this course is typical of traditional Euclidean Geometry courses, with strong emphasis on deductive proofs. The honors class is significantly more demanding than the Geometry class with emphasis on more abstract reasoning and challenging non-routine problem solving.

Prerequisites: B or better in Algebra I Honors or approval of the department.

ALGEBRA II

Course#: 432 Grades: 11-12 Credits: 1

Students enrolled in this second year algebra class will spend significant time on a variety of functions such as quadratic, polynomial, and exponential / logarithmic. Systems of equations and trigonometry are also covered. Concrete and real-life applications and examples will be used to apply the mathematical topics.

Prerequisites: Successful completion of Algebra I and Geometry or approval of the department.

ALGEBRA II (Abstract)

Course#: 431 Grades: 10-11 Credits: 1

Students will spend extensive time on analyzing, graphing and solving a variety of equations, such as quadratic, polynomial, exponential, logarithmic, rational, and periodic. Systems of equations and trigonometry are also covered. This course will be a transitional platform for more abstract math topics.

Prerequisites: Successful completion of Algebra I and Geometry or approval of the department.

ALGEBRA II (Honors)

Course#: 430 Grades: 9-11 Credits: 1

Students will spend extensive time on analyzing, graphing and solving a variety of equations, such as quadratic, polynomial, exponential, logarithmic, rational, and periodic. Systems of equations and trigonometry are also covered. The honors class will focus on advanced problems and applications and students are expected to challenge themselves on non-routine problems.

Prerequisites: A in Algebra I Honors (if doubling with Geometry Honors), or B or better in Honors Geometry, or approval of the department.

PRE-CALCULUS (Honors)

Course#: 483 **Grades**: 10-12 **Credits**: 1

Honors Precalculus synthesizes work completed in previous honors math courses. It focuses on understanding the relationship between different functions using their equations, graphs and applications. A comprehensive study of trigonometric functions is central to the course and there may be further work in areas of discrete mathematics covering when time allows. The course also introduces students to the basic concepts of calculus.

Prerequisites: B or better in Honors Algebra II or approval of the department..

INTRODUCTION TO PRECALCULUS I

Course#: 4520 **Grades**: 11-12 **Credits**: 1/2

This course is offered in the fall semester and focuses on algebraic work in functions, conics, sequences and series, and logarithms. This is a required course for students at the non-honors level intending to take Introduction to Pre-Calculus II.

Prerequisites: B or better in Algebra II or permission of the department.

INTRODUCTION TO PRECALCULUS II

Course#: 4521 **Grades**: 11-12 **Credits**: 1/2

This course is offered in the spring semester as a continuation of Pre-Calculus I and is intended for students who intend to enroll in a Pre-calculus/Calculus sequence in college. The curriculum focuses on a comprehensive study of trigonometry. Students will also continue to work on strengthening algebraic skills.

Prerequisites: Introduction to Pre-Calculus I or Honors Algebra II or permission of the department.

QUANTITATIVE REASONING

Course#: 4421 Grade: 12 Credits: 1

Quantitative reasoning is the ability to interpret data, solve problems and reason using numbers and mathematical ideas. Topics include the use and abuse of percentages, exploring statistical applications and probabilities, as well as linear and exponential growth and other related material. This course will award three college credits to students who earn a passing grade. (Students must also earn an acceptable score on the Accuplacer in order to receive college credits.)

Prerequisites: Algebra 2

STATISTICS I

Course#: 443 **Grade**: 12 **Credits**: 1/2

This course is recommended for students whose first college math course may be linked to the social sciences or business majors. The course will be an introduction to statistics covering topics including one- and two-variable data, correlation, regression, normal distributions, and experimental design.

Prerequisites: Successful completion of Algebra II or approval of the department..

STATISTICS II

Course#: 444 Grade: 12 Credits: 1/2

This class is a sequel to Statistics I. The course will go more deeply into the topics in semester I as well as covering topics including introductory probability, inference and confidence intervals.

Prerequisites: Successful completion of Statistics I or approval of the department.

AP STATISTICS

Course#: 495 **Grades**: 11-12 **Credits**: 1

This class strictly follows the Advanced Placement curriculum outlined by the College Board. Students will work with one- and two-variable data, correlation, regression, introductory probability, normal and non-normal distributions, experimental design, inference and confidence intervals. The course contains extensive writing and justification of student work. Students should be prepared to commit time outside of class in studying for the AP Exam.

AP examinations are administered in May.

Prerequisites: Successful completion of Algebra II Honors or Algebra II with teacher recommendation.

AP CALCULUS AB

Course#: 493 Grades: 11-12 Credits: 1

AP courses in calculus consist of a full high school academic year of work and are comparable to calculus courses in colleges and universities. It is expected that students who take an AP course in calculus will seek college credit, college placement, or both from institutions of higher learning. Success in AP Calculus is closely tied to the preparation students have had in courses leading up to their AP courses. Students should have demonstrated mastery of material from courses that are the equivalent of four full years of high school mathematics before attempting calculus. These courses should include the study of algebra, geometry, coordinate geometry, and trigonometry, with the fourth year of study including advanced topics in algebra, trigonometry, analytic geometry, and elementary functions.

Calculus AB is primarily concerned with developing a student's understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally.

AP examinations are administered in May.

Prerequisites: Prerequisite: B or better in Honors Pre-Calculus or approval of the department.

AP CALCULUS BC

Course#: 4932 Grade: 12 Credits: 1

Calculus BC is a full-year course in the calculus of functions of a single variable. Calculus BC is an extension of Calculus AB rather than an enhancement. Topics common to the two courses require a similar depth of understanding. Calculus BC continues to emphasize a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. Technology is used regularly by students to reinforce the relationships among the multiple representations of functions. The content of Calculus BC is designed to qualify the student for placement and credit in a course that is one course beyond that granted for Calculus AB.

AP examinations are administered in May.

Prerequisites: Successful completion of AP Calculus AB

SCIENCE & ENGINEERING

Our mission is to provide the best possible Science, Technology, Engineering and Mathematics experience for all students. The minimum graduation requirement for Falmouth High School is 3 years of science courses, but students planning on attending a 4-year college are strongly encouraged to take at least the core sequence of 4 science courses. Most students at FHS take Earth and Space Science in grade 9, Biology in grade 10, Chemistry in grade 11, and Physics in grade 12.

Engineering courses foster divergent thinking and provide a chance for students to experience first hand the design process. Students considering taking Advanced Placement courses should plan to take the introductory course at the honors level in that subject. Beyond AP courses, a wide variety of semester and year long electives are offered at both honors and regular levels.

STEM Endorsement

A STEM endorsement recognizes that motivated students have made the choice to devote a significant amount of effort and time in pursuing an extensive course of STEM-oriented work at FHS. Beginning in 2013 graduating seniors can earn a STEM endorsement on their diploma and transcript by meeting additional standards, listed below.

- 1. 4 years each of English, Math, and Science (Earth & Space, Biology, Chemistry, and Physics) and 3 years of Social Studies
- 2. 3 Additional Credits drawn from Science, Engineering and Math Electives
- 3. A minimum number of 7 ELO's (Extended Learning Opportunities) from STEM related extracurricular activities or projects
- 4. Complete a STEM related job shadow
- 5. A more extensive Senior Project involving a STEM theme or research
- 6. Enter the Maine State Science Fair

EARTH AND SPACE SCIENCE

Course#: 504 Grade: 9 Credits: 1

This introductory science course is grounded in skill building and problem solving presented through practical applications and real world connections. Students will be introduced to the engineering process, learn how to write formal lab reports, and learn how to properly collect scientific data in a variety of settings. Investigations are integral to the course, with student measurements and observations providing the evidence to help students uncover the fundamental laws and relationships in Earth and Space Sciences. This course includes units in fundamental chemistry, energy, astronomy, meteorology, oceanology, geology, and environmental science. This is a hands-on course in which students will see and feel the science, and it will provide the foundation on which students will later build understanding of concepts in Biology, Chemistry, and Physics courses. Working both in teams and as individuals, students will apply new skills to produce projects that provide solutions to technological problems. The mathematical ability needed to succeed in this course will be age and grade level appropriate.

Prerequisites: None

EARTH AND SPACE SCIENCE (Honors)

Course#: 502 Grade: 9 Credits: 1

The content and activities for the honors level will be the same as stated above, but the depth of inquiry and mathematical investigations will be at a higher level. It is intended for self-directed and self-motivated learners who accept the challenge of critical thinking and problem solving.

Prerequisites: Student performance data from the previous year and concurrent enrollments in Honors Algebra or Honors Geometry.

BIOLOGY

Course#: 531 Grade: 10 Credits: 1

This class is a survey course designed to familiarize students with some of the many aspects of biology -- the study of life. Topics covered include: ecology, cell biology, genetics, and natural selection & evolution. The main theme of this course is the interconnections that exist within and among all living things. Through labs, lectures, outside observations, exams, videos, group and individual projects, students will get a look into the fascinating study of the living world and how they fit into the world around them. Students will also gain experience in problem solving and using science process skills such as observation, prediction, data collection and organization, and data analysis to examine the living world.

Prerequisites: Successful completion of Earth and Space Science.

BIOLOGY (Honors)

Course#: 530 Grade: 10 Credits: 1

This course is designed for highly motivated students with both a strong desire to study science and the ability to think abstractly. Honors Biology will follow the same curricular framework as Biology with an emphasis on the molecular basis of Biology. Communication of scientific ideas is an important aspect in this course so students should expect a significant amount of outside reading and writing. There is a laboratory component to this course, and it is expected that students will continue to develop their critical and creative thinking skills. Students should have the ability and self-discipline to work in a self-directed environment.

Prerequisites: Student performance data from the previous year.

AP BIOLOGY

Course#: 5331 **Grades**: 11-12 **Credits:** 2

AP Biology is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. The AP Biology course should be taken by students after the successful completion of a first course in high school biology and one in high school chemistry. This course provides students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology.

The AP Biology Development Committee conducts college curriculum surveys and develops the AP Biology Examination so that it is representative of the topics covered by these colleges. Accordingly, goals have been set for percentage coverage of three general areas:

- * Molecules and Cells, 25%
- * Heredity and Evolution, 25%
- * Organisms and Populations, 50%

The percentage goals serve as a guide for the curriculum of an AP Biology course and will be used to apportion the time devoted to each category. The AP Biology exam is also constructed using the percentage goals as guidelines for question distribution.

Students who elect to take this course should have a strong interest in Biology, the ability and desire to read college textbooks, and the commitment to work hard until May.

AP examinations are administered in May.

Please note - this class will meet two periods all year.

Prerequisites: A grade of B or better in Honors Biology and Honors Chemistry, or a B or better in Honors Biology AND concurrent enrollment in Honors Chemistry with recommendation of Biology instructor. Permission of instructor is required for any other circumstances.

CHEMISTRY

Course#: 542 **Grades:** 11-12 **Credits:** 1

This class is a foundational course designed to familiarize students with some of the many aspects of chemistry. The course will cover chemical and physical properties and changes; atomic structure and periodic properties; chemical bonding and equations; naming and formulas; behavior of gasses, liquids and solids; solutions; and acids, bases and salts. The course is structured around using concepts of chemistry to answer scientific questions related to issues in the community, such as air and water quality, selection of metals for household and societal applications, and/or understanding energy sources between fossil fuels and alternative energies. The laboratory work will closely correlate to the topic sequence and is designed to substantiate or reveal practical applications of chemistry.

Prerequisites: Successful completion of Biology and Algebra 1.

CHEMISTRY (Honors)

Course#: 541 **Grades**: 11-12 **Credits**: 1

This course is designed for highly motivated students with a strong math background who plan to study science, medicine or engineering. The course covers all of the topics in Chemistry 542 in a more mathematical fashion. There is a strong emphasis on the quantitative aspect of chemical reactions. Students must be able to work independently in both a laboratory and classroom environment.

Prerequisites: B+ or better in Biology, Algebra I, Algebra II, and Geometry, or B or better in Honors Biology. Honors Algebra I, Honors Algebra II, and Honors Geometry. May be taken concurrently with Algebra II and Biology.

AP CHEMISTRY

Course#: 5431 **Grades**: 11-12 **Credits**: 1

AP Chemistry is designed to be the equivalent of the general chemistry course taken during the first college year. This course differs from the first year of Chemistry with respect to the textbook used, the number of topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, the kind of laboratory work done, and the time needed by students. There is a great emphasis on doing experiments in the laboratory in this course. You should take this course if you anticipate taking chemistry in college. Topics covered include Atomic Theory, Chemical Bonding, Nuclear Chemistry, Solids, Liquids and Gasses, Solutions, Reaction Types, Stoichiometry, Equilibrium, Kinetics and Thermodynamics.

AP examinations are administered in May.

Prerequisites: B+ or better in Chemistry or B or better in Honors Chemistry. Teacher recommendation is required for all other circumstances.

PHYSICS

Course#: 552 Grades: 11-12 Credits: 1

Physics explores the fundamental physical laws that govern the universe and the world. This course will build on the foundation provided during the freshman year, reviewing and supplementing topics in mechanics and then quickly exploring other topics of physics but primarily electromagnetism. Emphasis will be placed on practical applications of physics concepts with examples from work, sports and real-life. By the end of the course students will have completed a survey of all of the main topics of physics, including motion, forces, gravitation, energy, optics, electricity, magnetism, and circuitry. Students may apply for college credit from SMCC upon successful completion of the course, and enrollment at SMCC.

Prerequisites: Successful completion of Algebra II.

PHYSICS (Honors)

Course#: 551 **Grades**: 11-12 **Credits:** 1

Physics is the scientific discipline that is most integrated with mathematics. Honors Physics is designed for those students considering a math, science, medical or engineering path in college, or who want to develop their ability to approach any problems or situations with rigorous mathematical and logic based analysis. The foundation will be set with in depth investigations into Motion, Forces, Vectors and 2 dimensions, and Work and Energy. Additional topics such as Waves and Sound, Basic Electricity, Gravity and Astronomy, and Modern Physics will build on students' initial work.

There is a large lab component to this class. Students will make extensive use of internet resources and simulations, computer interfaces and data collection in the lab, and will design many of their own experiments.

Prerequisites: B+ or better in CP Science classes B or better in Honors Sciences. Honors Algebra 2 or Pre-Calculus should be taken concurrently. Students must be comfortable using mathematics to be most successful in this class.

AP PHYSICS 1

Course#: 5511 **Grades:** 11-12 **Credits**: 1

AP Physics 1 is Algebra Based and designed to be the equivalent to a first-semester of the two-semester college course taken by science majors interested in a challenging, non-calculus approach to physics. It is the physics course required for all pre-med majors, typically taken within the first 2 years of college. This course provides students with a scientific framework and the skills to solve problems through rigorous analysis and mathematical methods.

The course is organized into 4 sections:

- * Newtonian mechanics (including rotational dynamics and angular momentum) 50%
- * Momentum Work, Energy, and Power 20%
- * Mechanical Waves and Sound 15%
- * Fundamental Electricity and Circuits 15%

At least 25% of the instructional time will be spent on laboratory work, with an emphasis on inquiry-based investigations. Students will also be working online and using computers for lab simulations and computer interfaces for bench labs.

AP examinations are administered in May.

Prerequisites: Students should have maintained a B average or better in honors level science courses, or B+ in CP level science courses. Students should have completed Geometry and be concurrently taking Honors Algebra II or higher, and feel comfortable using mathematics.

AP PHYSICS 2

Course#: 5512 **Grades**: 11-12 **Credits**: 1

AP Physics 2 is designed to be the equivalent of the second-semester of the two-semester college course taken by science majors interested in a challenging, non-calculus approach to physics. It is the physics course required for all pre-med majors, typically taken within the first 2 years of college. This course provides students the opportunity to further develop the skills to problem solve through rigorous analysis and mathematical methods, to design experiments in order to answer questions in a scientific manner, and to perform error analysis on the results. The course covers fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. At least 25% of the instructional time will be spent on laboratory work, with an emphasis on inquiry-based investigations. Students will have significantly more freedom to explore physics than in AP Physics 1.

AP examinations are administered in May.

Prerequisites: B or better in Honors Physics, or AP Physics 1, and be concurrently enrolled in Honors Pre-calculus or higher, or permission of teacher(s).

AP ENVIRONMENTAL SCIENCE

Course # 554 **Grades:** 11-12 **Credits:** 1

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

AP examinations are administered in May.

Prerequisite: None

ANATOMY / PHYSIOLOGY (Honors)

Course#: 532 Grades: 11-12 Credits: 1

During this year-long course, we will focus on studying human anatomy (structure) and physiology (function). As we study various human systems, we will focus on understanding how these systems are interdependent, as well as the connection between form and function. It is less important that you are able to memorize terms than that you are able to analyze and respond to mechanistic questions. Therefore, our studies will focus on being able to answer "What if . . ?" types of questions about how the human body functions. Tests will primarily be open-note and are designed to be very challenging. If you are not willing to both read and do work outside of class, then this is not the class for you.

Prerequisites: A grade of B or better in Honors Biology and Honors Chemistry, or a B or better in Honors Biology AND concurrent enrollment in Honors Chemistry with recommendation of Biology instructor. Permission of instructor is required for any other circumstances.

ASTRONOMY & ASTROPHYSICS (Honors option is available)

Please note: There is an Honors option available when taking this course.

Course#: 557Grades: 11-12Credits: ½Honors Course#: 5570Grades: 11-12Credits: ½

This class is offered in a way that allows students to select either an honors or a non-honors path within the class. This elective course will present a broad range of topics and concepts in Astronomy & Astrophysics, including, but not limited to cosmic, galactic, and stellar evolution, actual and apparent celestial motion, interstellar and intergalactic distance, dimensionality of time, electromagnetic spectra, planetary processes, historical perspectives, and observational astronomy. Lab activities will be derived from various curricular sources, including, but not limited to NASA (Chandra X-ray, Telescope Educational Outreach), hands-on astrophysics (American Association of Variable Star Observers), and various texts. In addition, there will be at least one field trip to the Southworth Planetarium, and several opportunities for night viewing with telescopes. This is a math-intensive course.

Prerequisites: Successful completion of or concurrent enrollment in Algebra II.

BRAIN, NEUROPLASTICITY & MINDFULNESS (Honors option is available)

Course#: 537Grades: 11-12Credits: 1Honors Course#: 5371Grades: 11-12Credits: 1

This year-long course explores basic brain/neural anatomy and physiology, what neuroplasticity is, and how it affects the brain. Students will develop and explore questions such as what happens in the brain when we're stressed? Learning? Listening to music? Recovering from a brain injury?

In addition to this, we will explore various mindfulness practices in each class. Students will assess their own levels of anxiety, distraction, etc at intervals through the year to see how/if mindfulness practice is impacting their own experience of their brain function.

This course is partly student-designed. Taking this course involves a commitment on the part of each student to be an active participant in all aspects of class. We had fun the first year and I look forward to developing the next version of the course with you.

Prerequisites: Successful completion of Biology

THE SCIENCE OF FLIGHT

Course#: 5562 Grades: 11-12 **Credits**: 1/2

Students will learn about the forces that make aircraft fly - thrust, weight, lift, and drag. Additionally, students learn how aircraft are categorized, and identify the relevant parts of aircraft. Using this knowledge students will undertake several lab activities in which they explore topics covered in class and/or design and test their aircraft creations.

FORENSICS (Honors option is available)

Please note: There is an Honors option available when taking this course.

Course#: 5491Grades: 11-12Credits: 1Honors Course#: 5492Grades: 11-12Credits: 1

This class is offered in a way that allows students to select either an honors or a non-honors path within the class. Forensic Science is an in-depth, hands-on laboratory science class. This is a full year course that bridges science concepts and the criminal justice system. Forensic science integrates core concepts from biology, chemistry, and physics providing a unified way of understanding critical thinking and problem solving. Students will solve mock criminal investigations using a wide range of laboratory techniques to process and analyze evidence. Topics covered will include: crime scene analysis, physical/chemical analysis of various evidence types, hair/fiber/glass analysis, fingerprint comparison, document/handwriting analysis, firearms/ballistics, drugs/toxicology, entomology, blood (serology), and DNA analysis among others. Students will be expected to support their conclusions with evidence and sound scientific reasoning.

Prerequisites: None

MARINE SCIENCE (formerly Oceanology & Meteorology) (Honors option is available)

Please note: There is an Honors option available when taking this course.

 Course#: 5472
 Grades: 11-12
 Credits: ½

 Honors Course#: 5472H
 Grades: 11-12
 Credits: ½

This elective course will present a broad range of topics and concepts in oceanology, including, but not limited to: wave characteristics, ocean chemistry, currents, bathymetry, oceanography, coastlines, tides, thermodynamics, climate, wind belts, and storms. The course will focus on the intimate interdependencies between the ocean and the

atmosphere, and will consider the effect of human impact on both systems. Lab activities will generally be derived from introductory level college curricula. In addition, there will be field trips for data collection and interpretation. There will be an option for an Honors designation.

Prerequisites: Successful completion of Algebra I.

COMPUTER SCIENCE PRINCIPLES I (Honors option available)

Please note: There is an Honors option available when taking this course.

Course#: 6812 Grades: 9-12 Credits: ½ Honors Course#: 6814 Grades: 9-12 Credits: ½

Whether it's 3-D animation, engineering, music, app development, medicine, visual design, robotics, or political analysis, computer science is the engine that powers the technology, productivity, and innovation that drive the world. Computer science experience has become an imperative for today's students and the workforce of tomorrow in virtually all fields.

Computer Science Principles I (CSP I) introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. Topics covered include digital information, the internet, and web app programming. Assignments primarily consist of short readings, 1-2 page position papers on computer science topics, and programming projects.

CSP I covers the first half of the College Board AP Computer Science Principles curriculum. **However it is intended as the starting point for all grade levels and students with little or no previous knowledge of computer science.** Success in this course is most dependent on student engagement and timely work completion.

CSP I and AP CSP together cover the College Board Advanced Placement Computer Science Principles curriculum. Students who complete both courses would qualify to take the AP CSP Exam in the spring.

Prerequisites: Successful completion of Algebra I is recommended.

AP COMPUTER SCIENCE PRINCIPLES

Course#: 6813 **Grades**: 9-12 **Credits**: 1/2

<u>NOTE</u>: **CSP I MUST be taken before this course.**

Although taught as a separate class for logistical reasons, this course is the continuation of CSP I and collectively these two courses cover the College Board Advanced Placement Computer Science Principles curriculum qualifying students who complete both courses to take the AP CSP Exam in the spring.

AP CSP picks up where CSP I leaves off and extends the study of programming into more advanced techniques. In addition, big data and cyber security/global impacts are also covered. Finally class time is also devoted to preparing for the AP® Performance Task that is submitted to the College Board.

AP examinations are administered in May.

Prerequisites: Computer Science Principles I

COMPUTER PROGRAMMING III (HONORS option is available)

Please note: There is an Honors option available when taking this course.

Course#: 6811Grades: 10-12Credits: $\frac{1}{2}$ Honors Course#: 68114Grades: 10-12Credits: $\frac{1}{2}$

This course is a followup to Introduction to Computer Programming II and explores graphical user interfaces in Java and the Swing package. It is intended for students who, after completing the previous courses, would like to continue their study of programming and create more sophisticated programs.

Prerequisites: Either Intro to Computer Programming I and II or AP Computer Science A.

AP COMPUTER SCIENCE A

Course#: 6815 Grades: 9-12 Credits: 1

AP Computer Science A is an intensive, focused study of computer programming and is equivalent to a first-semester, college-level course in computer science. The course emphasizes object-oriented programming and design using the Java programming language.

Fundamental topics in this course include data types, sequence, selection, and iteration, classes, data structures, inheritance, and recursion. Skills practiced include: the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems.

At Falmouth High School, this course is intended for students who have previously completed Computer Science Principles I or who can demonstrate significant prior experience/ability for computer programming. Please contact Mr. Porter (jporter@falmouthschools.org) if you would like to take this course without taking CSP.

Prerequisites: Successful completion of Computer Science Principles I or permission from the instructor.

INTRODUCTION TO SCIENCE RESEARCH (HONORS OPTION AVAILABLE)

Please note: There is an Honors option available when taking this course.

Course#: 5592 Grades: 9-12 Credits: ½
Honors Course#: 5594 Grades: 9-12 Credits: ½

Only part of being a scientist involves knowing a lot of stuff. Another part involves discovering new and unknown stuff. The skills needed to ask a scientifically answerable question and to carry out independent research are best developed through actual experience. This class will provide that experience. Students will begin by completing simple, short investigations, and work to develop more complex and involved investigations. They will learn about different types of studies, read scientific papers (including peer published work), participate in different citizen science projects, learn the basics of scientific report writing, hear from outside experts, and by the end of the course, generate a scientific question that can be answered through their own research. Topics may include almost any sort of science, from astronomy through zoology. The only limits are the imagination and creativity of the student. Students may use the questions or early investigations as a place to start a project that leads to an entry into the Maine State Science Fair in March.

This course will provide a strong base for those seeking a STEM endorsement, (research projects are encouraged for STEM Senior Projects) and such students are advised to take this course early in their high school sequence to develop their skills and create a strong project. Students who complete this class are also stronger candidates for external internships and placements as they gain more experience.

Prerequisites: Ability to work independently with a high level of accountability.

INTRODUCTION TO TECHNOLOGY

Course#: 560 Grades: 9-11 Credits: 1/2

This course will introduce students to a minds-on/hands-on approach to the world of tools, materials, systems, and processes that are utilized to solve technological problems. Discover how and why technology has helped shape our lives through a series of hands-on lab activities covering production, transportation, communications, and energy systems. Working both in teams and as individuals, students will apply skills gained in English, mathematics, and science to produce projects that provide solutions to technological problems. This course is designed to provide an exploratory experience for students as they begin to think of career choices beyond high school.

Prerequisites: None

MAKE I

Course#: 5591 **Grades**: 9-11 **Credits**: 1/2

Make I provides a highly structured program, moving at a fast pace through fundamental skills in simple programming, robotics, electronics, and ROV construction. Based on the work of Emanuel Boss at the University of Maine and his "Engineering Literacy for Oceanography Majors" course, students will explore computer programming, electronics, sensors, and fabrication; then apply their learnings to the design, construction, and testing of an underwater remotely operated vehicle (ROV). This hands-on-minds-on class is designed to get underclassmen engaged with an engineering approach to learning.

Prerequisites: None

TECHNICAL DRAWING/COMPUTER AIDED DRAWING

Course#: 561 Grades: 10-12 Credits: 1

Just as students study languages to communicate effectively, technical drawing will cover the processes utilized by businesses and industry throughout the world to communicate through sketching, single view drawings, isometric, orthographic projections and assembly drawings. This unique class will prepare students heading for college with a solid background in technical drawing. The class will begin utilizing traditional drawing equipment (t-squares, triangles, and drawing boards), covering both mechanical and architectural drawing concepts. As the year progresses and basic drawing techniques are mastered, students will advance to computer assisted drawing (CAD) to generate solutions to drawing assignments.

Prerequisites: None

PRE-ENGINEERING

Course#: 562 Grades: 11-12 Credits: 1

Pre-Engineering is designed for the highly motivated student who has a good command of mathematics and science and wishes to pursue an engineering or high level technical career. Previous classes, Introduction to Technology and/or Technical Drawing would be beneficial to the student but not required at this time. This course will provide students with an opportunity to explore a systematic approach to design and problem solving utilized by engineers. Following an introduction to drawing techniques, students will be provided with instruction on the safe use of tools and equipment to facilitate the construction of a series of design challenge solutions. The challenges will explore mechanical and electrical concepts; investigate automation through the study of robotics and pneumatics; explore the strength and properties of materials and structures; and utilize Computerized Numerical Control (CNC) equipment to

fabricate prototypes. After gaining an understanding of the technological processes and systems, students will be encouraged to spend the last quarter of the course specializing in an independent design and problem solving activity concentrating on a specialized area of interest in the field of engineering. Documentation of the project will be kept in a design portfolio and presented at the end of the term.

Prerequisites: None

ADVANCED TOPICS IN ENGINEERING & TECHNOLOGY

Course#: 564 Grades: 11-12 Credits: 1

This course is designed for highly motivated students who plan to study a technical field at the postsecondary level.

In addition to the opportunities for in-depth study of student-determined independent work, large class projects will include:

- the development of an electric race car; and
- the Real World Design Challenge (national competition).

The electric race car project will include modifying a Bandolero (existing class of gasoline powered race car) to run on electricity, and then developing standards for this new class of racing vehicle to be used by students in other schools.

The Real World Design Challenge (RWDC) is a national competition that provides high school students the opportunity to work on real world engineering challenges that confront our nation's leading industries.

(Note: this course may be taken more than once)

Prerequisites: B or better in Technical Drawing/CAD or pre-engineering, or permission.

GARDEN/ORCHARD DESIGN & PRODUCTION (Honors option available)

Course #: 5474 **Grades:** 9-12 **Credit:** 1/4

Honors Course #: 5475 Grades: 9-12 Credit: ¼

This is an interdisciplinary class unlike other classes here at FHS. It is designed to allow students to learn the principles of sustainable food production and environmental land stewardship in a hands-on way while providing students the opportunity to complete a real-world, meaningful project.

The course will be divided into 4 quarters (.25 credit per quarter) following the rhythm of the seasons. Students are encouraged to make the class fit their schedule, but must sign up for the course by semester, and will be in a study hall when not enrolled in the class.

Students will design and carry out a project on their own or with a partner. One class per week will be devoted to class group work, and the rest of the time students will work independently on their project. Grading will be based on progress check-ins during the quarter, and the final product can take the form of a presentation, poster, video or some other mode presented during the end-of-quarter exhibition. Students will be involved in all aspects of project design and assessment.

Students may take the course multiple times, and the completed projects can serve as the basis for entries into academic exhibitions or competitions, such as the Maine State Science Fair or the Junior Science and Humanities Symposium. Talk to Mr. Njaa, Farmer Justin or Ms. Rodway for more information.

Below are some example options:

• Fall-Winter Quarters 1 & 2: Tend the garden, reap the harvest, measure the output of the garden. What is the productivity of the garden? What is the nutritional value of each crop grown? What was the weather and

climate like during the semester? Measure the temperature, light, weather, rain, soil nutrients and conditions. What can we learn from these measurements? What has this land been used for historically? Has it always been cropland? Woods? Fields? Who was here 100 years ago? 500? 1000? What is the physical makeup of the land, the climate and the plant and animal life.

• Winter-Spring Quarters 3 & 4 - Reflect on last year's garden and make plans for the coming season. What worked and what might be changed? Deeper research into the history and changes of the land, the plants, animals and people from the last ice age until now. What is permaculture, and how can understanding what plants are native to our area and climate help us decide what to grow and plant? How do the choices we make affect the climate we will be living in? Can we design a garden that will let us study genetics? Order, start and plant the seeds and seedlings for the 2022-23 garden. Plant and tend the garden until the summer team of students and teachers are ready to take over.

Prerequisite: None

POP-UP QUARTERLY ELECTIVES

What is a Pop-up Quarter-Credit Class? What makes it different from other classes?

A Pop-up Quarter-Elective class is a half-semester class, running during either the first or second half of a semester. It is designed to allow students the time to dive deeply into a particular subject with classmates in a way that is different from a typical subject-based class. Classes will typically consist of 1 "expedition" a week into the field, or workspace, and then students will use the rest of the scheduled time to work independently on their product with input and guidance from the teacher. Grading is primarily formative, with several assessed check-ins and a final project assessed for a final quarter grade. Student input into the assessment criteria and the assessment itself is expected. The main requirements for entering a class are curiosity and the ability and/or desire to work independently. Since this is the first year of operation, student participation is highly valued and will help shape the future classes in important ways. Students who sign up for a Quarter Credit Pop-up Course will be assigned a study for the quarter when the class does not run. Students may also take 2, quarter-credit classes in a semester when the timing works out. Most Pop-up Quarterly Electives will have an honors option.

Pop-up CubeSats (Honors option available)

Course #: P0255Grades: 9-12Credit: ¼ per termHonors Course #: P0256Grades: 9-12Credit: ¼ per term

For the past 3 years Falmouth HS has had a CubeSat team. The team has proposed and designed a Scientific Mission that has been selected to fly on Maine's first NASA CubeSat, MESAT-1. It is currently scheduled to launch in April 2022, and we will begin to actually receive and download the data shortly afterwards. Students in this class will learn about remote sensing, monitoring the environment from space, and how to read the data we have collected. They will then begin to analyze the data and present their findings to peers and to our mission partners, the University of Maine, the University of Southern Maine, and NASA. Research results can also be used to enter national and state science competitions where they may earn significant scholarships, recognition and research credibility that can be used for college. Class is appropriate for current CubeSat team members, and for any students with an interest in space exploration. By then, we may have other rocket and cubesat projects by Q4 that can also be worked on, based on work with USM, bluShift Aerospace, and UMO.

Prerequisite: None; talk to instructors if at all possible.

Pop-up Forestry Field Studies - S1, Q1 - (Honors option available)

Course #: P0251 Grades: 9-12 Credit: ¼ per term

Honors Course #: P0252 **Grades:** 9-12 **Credit:** ¼ per term

Forest ecology is the study of forested ecosystems, including their living (plants, animals, fungi) and nonliving (soil, water) parts. In this quarter-long course, students will: learn to ID forest species and sample our local forest biodiversity, estimate forest carbon pools, take and process tree cores to determine the age of trees, use a clinometer to calculate tree height, and attempt to reconstruct the history of our stand. If time allows, water quality and soil health will be assessed. Students should expect to spend most of class time outdoors!

Prerequisite: None

Pop-up Maple Sugar Science & Sugaring S2, Q3 (Honors option available)

Starting in February students will identify and characterize and measure maple trees on campus that are suitable for tapping and boiling the sap for maple syrup. Each tree's location will be mapped on Google Earth and statistics for that tree recorded. When the sap starts to flow, we will gather and measure sap regularly, and periodically boil the sap down to make maple syrup. Each year data will be recorded and saved, so over time a record of climate impact may be monitored

Prerequisite: None

Pop-up Observational Astronomy - SLOOH (Honors option available)

This class will involve collaboration with the University of Maine. The *Universe Explorers of Maine* online astronomy club will offer its members the ability to explore space from home using <u>SLOOH</u>. Class members will have opportunities to take astronomical images, share observations, go on exploration quests, and participate in online star parties with experts in the astronomy field. You will take your own images of the Moon, planets, comets, and numerous deep sky objects like galaxies and nebulas. You will also share your observations with others from around the world, and have the opportunity to contribute to citizen science discoveries in astronomy. Students who are in the class will complete 2-3 online learning quests of their choice which will teach them how to use the remote telescopes through their computer. They will gather images and answer research questions within the quests. 7 different research telescopes in the Canary Islands and Chile will be available for students to use. They will then request and download their own images and use them to either carry out original research, or create art through astrophotography.

Prerequisite: None

Pop-up Science Fair Preparation (Honors option available)

Course #: P0253Grades: 9-12Credit: ¼ per termHonors Course #: P0254Grades: 9-12Credit: ¼ per term

Did you know that your Maine State Science Fair project can earn you a full scholarship to U Maine Orono or USM? That projects that have won the Science Fair have gone on to National Competitions run by Intel and Regeneron, and won over \$100,000 in prizes? That every year more prizes and scholarships are added to the list? That you have the ability and capacity to do the same thing? This course is for students at every level, from beginners to people with a project already to go, and for anyone seeking the STEM Endorsement who wants support and help to organize and put their project together for the Fair in April. Students will move through the process of identifying a research question or

technical design challenge, designing and carrying out a research project and entering the Maine State Science Fair. This course may be taken multiple times, since some projects may grow and improve from year to year.

Grades 9-12, no prerequisites. Students may bring a project they are already working on and focus on getting it ready to present, or start a new one that will be ready for the Science Fair in March. Students can also talk to any science teacher with an idea of their own. Class will meet on Fridays from 12:00-1:00 and work independently with regular check-ins to maintain momentum towards a quality entry into this year's Maine State Science Fair on March 26th.

Prerequisite: None

SOCIAL STUDIES

The Social Studies curriculum includes instruction and assessment in the state-mandated content standards of civics and government, economics, geography, and history.

- 1. Ninth graders are required to take one year of World History. Placement in Honors World History is based on student performance data during the 8th grade.
- 2. Tenth graders are required to take one semester of 20th Century World History. Placement in Honors 20th Century World History is based on student performance data from the previous year. Tenth graders are also required to take either one semester of U.S. Civics and Government or the year-long AP U.S. Government and Politics. Placement in AP U.S. Government and Politics is based on student performance data from the previous year.
- 3. Eleventh graders are required to take one year of American History or AP U.S. History. Placement in AP U.S. History is based on student performance data from the previous year.
- 4. Eleventh and twelfth graders may earn additional Social Studies credits by choosing from the various electives that are offered.

WORLD HISTORY

Course#: 208 Grade: 9 Credits: 1

This year-long course surveys the political, economic, and social history of Europe, the Middle East, Asia, and Africa to 1900. Skills emphasized include conducting historical research, analyzing historical sources, and making historical arguments. In addition, this course requires analysis and interpretation of primary and secondary sources.

Prerequisites: None

WORLD HISTORY (Honors)

Course#: 209 Grade: 9 Credits: 1

This year-long course surveys the political, economic, and social history of Europe, the Middle East, Asia, and Africa to 1900. Skills emphasized include conducting historical research, analyzing historical sources, and making historical arguments. In addition, this course requires extensive analysis and interpretation of primary and secondary sources.

Prerequisites: Student performance data from the previous year.

20th CENTURY WORLD HISTORY

Course#: 210 Grade: 10 Credits: 1/2

This semester course explores the political, economic, and social history of Europe, the Middle East, Asia, and Africa during the 20th century as well as contemporary global issues. Skills emphasized include, research, essay writing, and analysis of a variety of sources.

Prerequisites: None

20th CENTURY WORLD HISTORY (Honors)

Course#: 211 **Grade**: 10 **Credits**: 1/2

This semester course explores the political, economic, and social history of Europe, the Middle East, Asia, and Africa during the 20th century as well as contemporary global issues. Skills emphasized include, research, essay writing, and analysis of a variety of sources. In addition, this course requires extensive analysis and interpretation of primary and secondary sources.

Prerequisites: Student performance data from the previous year.

U.S. CIVICS AND GOVERNMENT

Course#: 212 Grades: 10 Credits: 1/2

This semester course involves the study of general concepts in political science as well as American political history, especially of the Revolutionary and early Federal periods. Topics covered include the constitutional basis of the U.S. government; political culture; political parties; interest groups and media; institutional and informal sources of political power; development of public policy; and civil rights and liberties.

Prerequisites: None

AP U.S. GOVERNMENT AND POLITICS

Course#: 2600 Grades: 10 Credits: 1

This year-long course gives students an analytical perspective on government and politics in the United States. It includes the study of general concepts in political science as well as an examination and evaluation of American political history. Topics covered include the constitutional basis of the U.S. government; political culture and socialization; political parties, interest groups, and the media; national institutions and informal sources of political power; the development of public policy; and civil rights and liberties. *Juniors and Seniors may enroll in this course if space is available.

AP examinations are administered in May.

Prerequisites: Student performance data from the previous year.

AMERICAN HISTORY

Course#: 215 Grade: 11 Credits: 1

This year-long course examines the development of the United States from a federal republic in the early 19th century to the world power that it is today. Thematic emphasis will be placed on the spread of democracy and civil liberties, the rise of the middle class, the effects of immigration, the growth of the central government, and the influence of the United States on global history in the 20th century. While the curricular emphasis is primarily on the United States, the course will include selected topics in the history of Canada and Latin America.

Prerequisites: None.

AP U.S. HISTORY

Course#: 216 Grade: 11 Credits: 1

This year-long course is a rigorous thematic survey of U.S. history, designed to strengthen the analytical skills and factual knowledge necessary to deal critically with problems in United States history. The course begins with Pre-Columbian America and ends in the present day. The reading and writing components of this course are significantly greater in quantity and complexity over the American History course.

AP examinations are administered in May.

Prerequisites: Student performance data from the previous year.

ELECTIVES

AP EUROPEAN HISTORY

Course#: 268 Grades: 11-12 Credits: 1

This year-long course is an intensive chronological survey of major events and trends in Europe from approximately 1450 to the present. Major cultural, social, economic, and political themes will be explored and connections made across periods and with today's world. During the first semester, students will examine the period from the Renaissance to the French Revolution and Napoleonic era. The 19th and 20th centuries are the focus during the second semester. Students will have the opportunity to read and discuss primary sources, to analyze the interpretations of leading historians and to develop their own academic voice.

AP examinations are administered in May.

Prerequisites: None

AP WORLD HISTORY: MODERN

Course#: 2091 **Grades**: 11-12 **Credits**: 1

Humans have been on our planet for at least 200,000 years, but AP World History: Modern will explore just the last 12,000 or so with a particular emphasis on the time period assessed on the AP World Exam: 1200 to the present. This year-long course forces students to step back from individual cities, countries, people, and conflicts to examine the larger patterns and trends that have shaped human history from the development of agriculture to the present. Analysis of major social, cultural, economic, and political themes will develop students' ability to understand world history as the common story of humanity. Students will also examine how cultural perspectives influence the way various societies understand and view both history and current events.

AP examinations are administered in May.

Prerequisites: None

AP HUMAN GEOGRAPHY

Course#: 2191 **Grades**: 9-12 **Credits**: 1/2

This semester course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications.

AP examinations are administered in May.

Prerequisites: None

AP PSYCHOLOGY

Course#: 263 Grades: 11-12 Credits: 1

This year-long course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings. Important psychological experiments, facts, principles, and phenomena associated with each of the perspectives and major subfields within psychology are explored. Students also learn about the methods psychologists use in their science and practice.

AP examinations are administered in May.

Prerequisites: None

AMERICAN CIVIL RIGHTS MOVEMENTS

Course#: 266 **Grades**: 10-12 **Credits**: 1/2

This course will examine the complicated history of America as the land of freedom, equality, and inclusion for *some*. We will draw comparisons across historically marginalized groups and explore America's rich history of protest. As we learn about movements for rights, representation, and security, we will consider the extent to which national structures and attitudes have changed over time. This course encourages students to lean into discomfort as they consider ethical questions, new perspectives, and diverse voices.

Prerequisites: None

ECONOMICS

Course#: 261 **Grades**: 9-12 **Credits**: 1/2

Economics is a social sciences course that familiarizes students with economic terms and theories and seeks to enable a better understanding of current economic and political issues. Microeconomic topics include supply and demand, incentives, and weighing the costs and benefits of a choice. Macroeconomic topics include a comparison of economic systems as well as the study of economic measurement and policy. This course encourages students to consider different points of view as they investigate economic questions and issues.

Prerequisites: None

HOLOCAUST STUDIES

Course#: 271 **Grades**: 11-12 **Credits**: 1/2

This semester course is an in-depth examination of the Holocaust of 1939-45. We will examine how this happened and try to address the more complex question of why this happened. We will approach the topic using literature, psychology, sociology and history. As a student, you will be able to examine ethical values as you analyze and assess the decisions and actions of perpetrators, bystanders, victims, and resisters. The crux of the course will focus on those actions, decisions and behaviors that engender and cultivate compassionate, ethical, pluralist, democratic societies and what may happen when those things are lost.

Prerequisites: None

SOCIOLOGY

Course#: 2622 **Grades**: 11-12 **Credits**: 1/2

Why do we associate pink with girls and blue with boys? Why are some people poor and some people rich? Why do societies organize themselves around skin color? This semester course provides students with an introduction to the field of sociology. Students will learn to identify and analyze how cultural and social norms, expectations, and values are developed and taught and how they shape how individuals behave and understand their place in society. Specific topics that will be analyzed include gender & sexuality, social class, and race & ethnicity.

Prerequisites: None.

PHILOSOPHY

Course#: 273 **Grades**: 11-12 **Credits**: 1/2

This semester course will explore the foundations of modern and contemporary philosophy as a means to expand our sphere of moral and ethical concern. Utilizing primarily literature, film, and various means of discourse, students will analyze, interpret, and implement elements of philosophical movements and frameworks that cover a broad range of topics that potentially include culture, politics, religion, work, leisure, charity, human rights, artificial intelligence, consciousness, intention, and more.

Prerequisites: None.

SOCIAL STUDIES

The Social Studies curriculum includes instruction and assessment in the state-mandated content standards of civics and government, economics, geography, and history.

- 1. Ninth graders are required to take one year of World History. Placement in Honors World History is based on student performance data during the 8th grade.
- 2. Tenth graders are required to take one semester of 20th Century World History. Placement in Honors 20th Century World History is based on student performance data from the previous year. Tenth graders are also

- required to take either one semester of U.S. Civics and Government or the year-long AP U.S. Government and Politics. Placement in AP U.S. Government and Politics is based on student performance data from the previous year.
- 3. Eleventh graders are required to take one year of American History or AP U.S. History. Placement in AP U.S. History is based on student performance data from the previous year.
- 4. Eleventh and twelfth graders may earn additional Social Studies credits by choosing from the various electives that are offered.

9th grade requirements

WORLD HISTORY

Course#: 208 Grade: 9 Credits: 1

This year-long course surveys the political, economic, and social history of Europe, the Middle East, Asia, and Africa to 1900. Skills emphasized include conducting historical research, analyzing historical sources, and making historical arguments. In addition, this course requires analysis and interpretation of primary and secondary sources.

Prerequisites: None

WORLD HISTORY (Honors)

Course#: 209 Grade: 9 Credits: 1

This year-long course surveys the political, economic, and social history of Europe, the Middle East, Asia, and Africa to 1900. Skills emphasized include conducting historical research, analyzing historical sources, and making historical arguments. In addition, this course requires extensive analysis and interpretation of primary and secondary sources.

Prerequisites: Student performance data from the previous year.

10th grade requirements

20th CENTURY WORLD HISTORY

Course#: 210 **Grade**: 10 **Credits**: 1/2

This semester course explores the political, economic, and social history of Europe, the Middle East, Asia, and Africa during the 20th century as well as contemporary global issues. Skills emphasized include, research, essay writing, and analysis of a variety of sources.

Prerequisites: None

20th CENTURY WORLD HISTORY (Honors)

Course#: 211 Grade: 10 Credits: 1/2

This semester course explores the political, economic, and social history of Europe, the Middle East, Asia, and Africa during the 20th century as well as contemporary global issues. Skills emphasized include, research, essay writing, and analysis of a variety of sources. In addition, this course requires extensive analysis and interpretation of primary and secondary sources.

Prerequisites: Student performance data from the previous year.

U.S. CIVICS AND GOVERNMENT

Course#: 212 Grades: 10 Credits: 1/2

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Prerequisites: None

AP U.S. GOVERNMENT AND POLITICS

Course#: 2600 Grades: 10 Credits: 1

This year-long course gives students an analytical perspective on government and politics in the United States. It includes the study of general concepts in political science as well as an examination and evaluation of American political history. Topics covered include the constitutional basis of the U.S. government; political culture and socialization; political parties, interest groups, and the media; national institutions and informal sources of political power; the development of public policy; and civil rights and liberties. *Juniors and Seniors may enroll in this course if space is available.

AP examinations are administered in May.

Prerequisites: Student performance data from the previous year.

11th grade requirements

AMERICAN HISTORY

Course#: 215 Grade: 11 Credits: 1

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Prerequisites: None.

AP U.S. HISTORY

Course#: 216 Grade: 11 Credits: 1

This year-long course is a rigorous thematic survey of U.S. history, designed to strengthen the analytical skills and factual knowledge necessary to deal critically with problems in United States history. The course begins with

Pre-Columbian America and ends in the present day. The reading and writing components of this course are significantly greater in quantity and complexity over the American History course.

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AP examinations are administered in May.

Prerequisites: None

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Course#: 2191 **Grades**: 9-12 **Credits**: 1/2

This semester course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications.

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Prerequisites: None

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This year-long course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings. Important psychological experiments, facts, principles, and phenomena associated with each of the perspectives and major subfields within psychology are explored. Students also learn about the methods psychologists use in their science and practice.

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Prerequisites: None

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AP examinations are administered in May.

Prerequisites: None

AMERICAN CIVIL RIGHTS MOVEMENTS

Course#: 266 **Grades**: 10-12 **Credits**: 1/2

This course will examine the complicated history of America as the land of freedom, equality, and inclusion for *some*. We will draw comparisons across historically marginalized groups and explore America's rich history of protest. As we learn about movements for rights, representation, and security, we will consider the extent to which national structures and attitudes have changed over time. This course encourages students to lean into discomfort as they consider ethical questions, new perspectives, and diverse voices.

Prerequisites: None

ECONOMICS

Course#: 261 **Grades**: 9-12 **Credits**: 1/2

Economics is a social sciences course that familiarizes students with economic terms and theories and seeks to enable a better understanding of current economic and political issues. Microeconomic topics include supply and demand, incentives, and weighing the costs and benefits of a choice. Macroeconomic topics include a comparison of economic systems as well as the study of economic measurement and policy. This course encourages students to consider different points of view as they investigate economic questions and issues.

Prerequisites: None

HOLOCAUST STUDIES

Course#: 271 **Grades**: 11-12 **Credits**: 1/2

This semester course is an in-depth examination of the Holocaust of 1939-45. We will examine how this happened and try to address the more complex question of why this happened. We will approach the topic using literature, psychology, sociology and history. As a student, you will be able to examine ethical values as you analyze and assess the decisions and actions of perpetrators, bystanders, victims, and resisters. The crux of the course will focus on those actions, decisions and behaviors that engender and cultivate compassionate, ethical, pluralist, democratic societies and what may happen when those things are lost.

Prerequisites: None

PHILOSOPHY

Course#: 273 **Grades**: 11-12 **Credits**: 1/2

This semester course will explore the foundations of modern and contemporary philosophy as a means to expand our sphere of moral and ethical concern. Utilizing primarily literature, film, and various means of discourse, students will analyze, interpret, and implement elements of philosophical movements and frameworks that cover a broad range of topics that potentially include culture, politics, religion, work, leisure, charity, human rights, artificial intelligence, consciousness, intention, and more.

Prerequisites: None.

SOCIOLOGY

Course#: 2622 **Grades**: 11-12 **Credits**: 1/2

Why do we associate pink with girls and blue with boys? Why are some people poor and some people rich? Why do societies organize themselves around skin color? This semester course provides students with an introduction to the field of sociology. Students will learn to identify and analyze how cultural and social norms, expectations, and values are developed and taught and how they shape how individuals behave and understand their place in society. Specific topics that will be analyzed include gender & sexuality, social class, and race & ethnicity.

Prerequisites: None.

FINE ARTS

CONCERT BAND

Course#: 870 Grade: 9-12 Credits: 1

Rehearsal and performance of standard wind band literature geared to the ability of the group. Musical concepts and artistic expression will be emphasized. Public performances, including school concerts, evening performances, contests and festivals, and some extra curricular rehearsals are required. All students will be assigned a band sectional once a week taken from a study hall period. In band sectionals, we will focus on instrumental technique and individual instruction.

Prerequisites: Previous instrumental experience in Middle/High School Concert Band or by permission of instructor.

CONCERT CHOIR

Course#: 880 Grade: 9-12 Credits: 1

Concert Choir is a performance based vocal experience, including solo, small group, and large ensemble performances in a variety of musical styles. Students are instructed in proper vocal technique, solo singing, ensemble singing, music literacy, and artistic expression.

All Concert Choir members are expected to perform in a minimum of four school concerts. Chorus sectionals are also required during half of one study hall, in which individuals and small groups are assessed for further understanding and development of music fundamentals and choral literacy.

Prerequisites: None

CONCERT CHOIR (CHORUS) (Semester)

Course#: 8801 **Grade**: 9-12 **Credits**: 1/2

Please see the Concert Choir description. Chorus will run in conjunction with Concert Choir, but students can enroll for a semester rather than committing to an entire year.

Prerequisites: None

CONCERT BAND/CONCERT CHOIR

Course#: 885 Grade: 9-12 Credits: 1

Students should sign up for this option if they want to participate in BOTH concert band and concert choir. See courses for descriptions and outcomes.

Prerequisites: Previous instrumental experience in Middle/High School Concert Band or by permission of instructor.

MUSIC THEORY 1

Music Theory I will help students develop a working music vocabulary with an emphasis on ear-training, sight-singing, species counterpoint, four part-writing, and keyboard facility. Although there will be a review of intervals, scales, chords, key signatures, meters, and the circle of fifths, at the beginning of the Semester, students who have a basic understanding of these terms entering the course will progress with more ease. A working knowledge in these areas is mandatory by the end of the first few weeks of the quarter. Interested students may continue on to Music Theory II, Semester II.

Prerequisites: None

SONGWRITING

Course#: 8531 **Grade**: 9-12 **Credits**: 1/2

Students will study the craft of writing music through writing and analyzing songs in a variety of styles and genres. Students will learn about the creative craft of writing music by acquiring familiarity with music terminology, melody writing, and lyric writing. Students will learn through classroom discussions and examples as well as project oriented assignments, and the creation of a final portfolio of their own written music. It is encouraged that students be able to play an instrument, or sing, but it is not required.

Prerequisites: No previous music experience necessary, but a willingness to sing and perform is encouraged.

GUITAR

Course#: 857 **Grade**: 9-12 **Credits**: 1/2

This course is designed for the student who has limited to intermediate musical experience, and who has interest in learning the basics of music and of playing guitar. The class will serve as an introduction to the guitar, music notation and TAB reading, music theory, music history, and songwriting. The class focuses on helping the student with little musical training develop a basic understanding of music. Students will learn how to play the guitar at a beginning/intermediate level by working individually and as an ensemble on various songs in a variety of genres. Students can retake the course and work on more challenging intermediate concepts. **Students must have their own guitar (acoustic or electric & amplifier).**

Prerequisites: No previous music experience necessary.

INTRODUCTION TO AUDIO ENGINEERING

Course#: 8777 **Grades**: 9-12 **Credits**: 1/2

This NEW music class is designed for the student with little or no training in music with an interest in learning more about how music works and how to put together music electronically. Students will work with a variety of audio technology and software (including pro-tools or Logic) to record live sound, and manipulate sound electronically. Students will also work with beat making software to develop grooves to be used in a variety of styles or settings. Students will also create a film score with original elements. Students begin to develop a vocabulary of common audio definitions and concepts. Students will have hands-on experience with live and recorded sound equipment and will be expected to participate in helping run live sound at music events during the semester.

Prerequisites: No previous music experience necessary.

JAZZ ENSEMBLE/JAZZ BAND

Course#: 877 **Grades:** 9-12 **Credits:** 1/2

Rehearsals are once a week, with additional rehearsals scheduled as needed. Rehearsal and performance of big band jazz, swing, and contemporary music. Discussion of techniques of improvisation. Public performances, competition, and field trips are required.

Prerequisites: Concert Band and auditions in the fall. See instructor for audition information.

PIANO LAB

Course#: 8788 **Grades**: 9-12 **Credits**: 1/2

Piano lab is a performance based class open to beginner and advanced beginner piano students. Through multimedia presentations, online sites, a modern electronic piano lab, small group and individual instruction, and hands-on practice, students will learn the basics necessary to play the piano. Students will learn and apply knowledge of musical notation, symbols and terminology to perform music with greater complexity as the course progresses.

Prerequisites: No previous music experience necessary.

STEEL DRUM BAND I

Course#: 8560 **Grades**: 9-12 **Credits**: 1/2

Rehearsal and performance of music for steel drum band. We will study and perform a variety of music for steel drums, including traditional literature, geared to the ability of the group. Students will learn to play different steel drums ("pans") as well as associated percussion instruments. Public performances, including school concerts, assemblies, and out of school performances will be required.

Prerequisites: No previous music experience necessary.

STEEL DRUM BAND II

Course#: 8561 **Grades**: 9-12 **Credits**: 1/2

This course is designed for students who have taken Steel Drums I and would like to continue with further instruction and more challenging rehearsal and performance of music for steel drum band. In this second level students will build on fundamentals gained in Steel Drums I, and we will study and perform a variety of music for steel drums, including traditional literature, geared to the ability of the group. Students will learn to play different steel drums ("pans") as well as associated percussion instruments. Public performances, including school concerts, assemblies, and out of school performances will be required.

Prerequisites: Steel Drum Band I

STRINGS ENSEMBLE

Course#: 8942 **Grade**: 9-12 **Credits**: ½

If you play violin, viola, cello or bass, sign-up for this class. This ensemble will focus on rehearsal and performance of standard string ensemble literature geared to the ability of the group. Musical concepts and artistic expression will be emphasized. The ensemble will meet as a co-curricular ensemble, but will have public performances and assessments in order for students to receive a partial Fine Arts credit.

Prerequisites: Previous or current private lessons on violin, viola, cello, or double bass or by permission of the instructor.

CHAMBER SINGERS, JAZZ SINGERS, a cappella Ensemble, and other small ensembles

Course#: 8832 **Grade**: 9-12 **Credits**: 1/2

(Held before school)

Groups include Chamber Singers and Jazz Singers each year. Other groups by request are: a cappella, Women's Ensemble, Men's Ensemble, or student run ensembles approved by a music faculty member.

Depending on the ensemble, rehearsals and performances of traditional choral literature, a cappella, contemporary and jazz music. Instructional emphasis on vocal technique, ensemble balance, vocal independence, and stylistic nuances. Each small group will perform a minimum of two formal concerts per year, and in addition might perform run-out concerts in the community and perform in the district and state wide competition.

All of these vocal groups consist of members of Chorus. Jazz Singers also need to be members of Chamber Singers. Students may participate in more than one ensemble.

Adviser: Ms. Northrup: wnorthrup@falmouthschools.org

Prerequisites: Concert Choir or audition or permission of instructor.

ACTING I

Course#: 852 **Grades**: 9-12 **Credits**: 1/2

This class is open to any interested students. Acting experience is not necessary. The class will focus on rudimentary acting techniques and touch on the different schools of theatre training. There will be work in monologues, scenes, and complete scripts. Students will study improvisation through theatre games and activities. They will learn stage directions and participate in movement study. The class will be production oriented and all students will participate in one or more one acts.

Prerequisites: None

ACTING FOR FILM

Course#: 8522 Grades: 9-12 Credits: 1/2

This is a production level course, which will move from monologues and individual theatrical presentation to dialogues and scene work. The class will also teach basic filming techniques from shooting to editing. The final project will be short films or filmed scenes that assess how students have improved in two critical areas of film production. The class will collaborate with the Screenwriting and Film Production class when possible.

Prerequisites: None

INTRODUCTION TO THEATRE

Course#: 851 **Grades**: 9-12 **Credits**: 1/2

This survey course introduces students to theatre through the history of the art. Students will explore different historic styles beginning with Ancient Greece and learn about the evolution of theatre through the Renaissance. They will learn the components of scripts and study different historic styles. There will be two major projects and emphasis is placed on creativity and understanding of the various historic influences on theatre.

Prerequisites: None

ADVANCED THEATRE

Course#: 8551 **Grades**: 9-12 **Credits**: 1/2

This class is designed for the serious theatre student. Students will explore different ways to develop a character and will spend time on method and style. There will be scene work and monologue work with peer critiques. There will be in depth study of several scripts including comparisons with film versions of those scripts. The class may include some technical work on set, lighting and costume design.

Prerequisites: None

MAKING STUDENT FILM

Course #: 669 Grades: 9-12 Credits: ½

This film making workshop expects students to be producing film during and after class. Class time will be spent doing one period film challenges and working on all aspects of filming. Students will be expected to participate and learn a variety of film making skills including acting, writing, filming, editing, producing, and more. Successful students will show their learning by producing their own short film they will submit to the Anchor Film Festival. Students will be expected to work closely with students enrolled in Creative Writing Screenwriting. (Students can enroll in both classes.)

STORYTELLER'S THEATER

Course#: 8510 **Grades**: 9-12 **Credits**: 1/2

Students in this class will work with material including children's folktales, historical stories, and classical literature to develop children's theatre scripts. The class will produce the scripts and local elementary schools will come to the Theatre to see the productions. Students would also have the opportunity to present their productions at a Festival for student written plays in late May.

Prerequisites: None

THEATER PRODUCTION

Course#: 8553 **Grades**: 9-12 **Credits**: 1/2

This class is designed for any student interested in learning about the many aspects that go into staging a theater production including stage design, lighting, script selection and preparation, creating and adhering to schedules, managing cast and crew, advertising and promoting the show, and other aspects of putting on a successful production. Students will be able to participate in the festival show as a workshop for the course and will, as a major project and assessment, design their own theater production proposal that contains all the key pieces of preparing to stage a show.

Prerequisites: None

Performing - Fine Arts Diploma Endorsement Program

Qualifications: A Fine Arts Endorsement recognizes the commitment, additional coursework, and many extracurricular activities that students motivated in the Arts have made during their time at Falmouth High School.

Students have the opportunity to apply for this program at the start of their sophomore year. Performing Arts coursework taken during a student's freshman year can count towards the requirements. All students **will be required to keep a journal / portfolio preferably digitally through a shared Google Drive folder.** The portfolio will include this form, evidence of the requirements for this endorsement, and other paperwork regarding the endorsement requirements.

Declaration of participation in a Fine Arts Diploma Endorsement Program will be made during the second semester of each year.

Music Strand Requirements

Class Requirements: Band and/or Chorus: 3 years participation required (must include senior year)

Extended Learning Opportunities (ELO)

- **District 2 / All State Auditions:** 4 auditions minimum required, one of each necessary
- **Concert Attendance:** 4 minimum verified by program / ticket, blog entry / review / critique (variety of styles)
- **Volunteering:** 20 hours minimum (band buddies, nursing home, church choir, Tri-M, "Foodstock" concerts)
- **Ensembles:** One year participation in optional ensembles, and school or community-based ensembles.
- **Optional school based ensembles:** Jazz Band/Combo, Pit Orchestra, Chamber Singers, Women's Ensemble, Vocal Jazz Singers.
- Optional outside school ensembles: PYWE/PYSO, Musica de Filia, Boys Singers of Maine, Italian Heritage Center Band, Barbershop Group, 317 Main Street Ensembles, Midcoast School

Junior Job Shadow and Senior Project: must be in Music Endorsement area

Optional Electives: Summer Music Camps, Private Lessons, Honors Festivals (District 2, All State, All Eastern, ACDA (examples but not limited to and which may count up to 2 ELO's).

Theater Strand Requirements

Class Requirements – 6 Semesters

- 1. Introduction to Theatre OR Acting I (.5)
- 2. Advanced Theatre (.5)
- 3. Advanced Theatre II (.5)

Extended Learning Opportunities (ELO) - 30 Units – at least one unit from each category

- 1. Participation performing in or doing substantial tech work in at least 2 productions a season (5–10 ELO's)
- 2. Committed and Creative work as an Associate Director for Elementary and or Middle School Theatre (2 ELO's)
- 3. Participation in an outside production summer theatre or community theatre 1 ELO
- 4. Attendance at an outside theatre production writing a review of that production 1 ELO
- 5. Being a member of the Festival cast or crew in a major way for at least one season 5 ELOs each season

Other Requirements

- 1. Attendance at a minimum of two Art Department events (art show, concert/production you are NOT involved in)
- 2. One art class in another discipline (music or fine art)
- 3. Auditioning give a prepared audition for a production
- 4. Job Shadow Junior year
- 5. Senior Project

Visual Fine Arts Diploma Endorsement Program

Endorsement Form

Qualifications: See above Fine Arts Endorsement.

Visual Art Strand Requirements:

Class Requirements: 6 semester-length courses in the Fine Arts Department

Extended Learning Opportunities: 30 ELO's (requires documentation).

Examples include, but are not limited to:

- Art-related summer programs and/or camps
- Private tutoring/lessons
- Gallery and museum visits
- Attending performances by other artists
- Scenic design for the FHS Theatre Program

Other Requirements

- Art-related volunteering within the community
- Establish an arts faculty mentor/facilitator by the junior year
- Junior Job-shadow in an arts-related field
- Student must present their Senior Show (artwork) at the FHS Annual Art Exhibit
- The Senior Project must incorporate a Fine Arts element
- Students present their digital art portfolio at their Senior Presentation to an art faculty member

VISUAL ARTS

Introduction to Art (formerly Foundations of Art) or Art History is a prerequisite for upper level art courses.

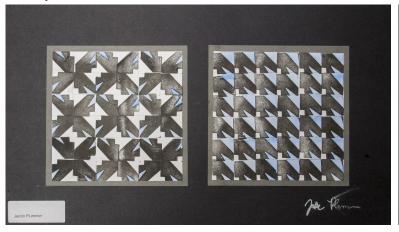
The Visual Arts program at Falmouth High School will be modified this year to offer courses that are conducive to virtual teaching and learning. Please see the course descriptions below. We are excited about the fall semester. We will be meeting in smaller groups to ensure safety and social distancing. Ceramic wheel throwing will not be offered if we go 100% virtual learning.

INTRODUCTION TO ART

Course#: 8021 **Grades**: 9-12 **Credits**: 1/2

Introduction to Art (formerly known as Foundations of Art) is designed to help students gain insight, skills, and confidence in making and understanding art. Students will focus on six basic elements of both two- and three-dimensional art: line, shape/form, value, space, texture/pattern and color. The course is divided into three units: 1.Pattern/Texture/Composition; 2.Drawing/Composition; and 3. Painting/Color/Composition. The student's experience in this course will give them the knowledge and the means of identifying their artistic strengths and build interest in the visual arts.

Prerequisites: None







Art History

Course#: 803 **Grades**: 9-12 **Credits**: 1/2

This studio art course will teach students about art and artists who worked from prehistoric times to the present day. We will examine the impact of imagination and creativity on society. Important works of art and influential movements will be presented and discussed through slide lectures, digital presentations, virtual museum visits, documentary videos, and written testimonials by artists. Students will participate in studio art experiences, and have class discussions about their own artworks and ideas based on information learned throughout the course. For students

interested in taking Drawing and Painting, Art History does not count as a prerequisite. You must take Introduction to Art (formerly known as Foundations of Art).









Prerequisites: None

ART HISTORY II

Course#: 8031 **Grades**: 9-12 **Credits**: 1/2

This is a continuation of Art History with an emphasis on contemporary and non-Western art. We will begin with a brief overview of the 18th century, then move through to the twenty-first century. Students will research and investigate the current art world, while learning about installation, performance and new media arts. This course will also discuss non-Western artworks in their cultural context, and how they have contributed to the global art world. Students will be expected to participate in discussions and create studio projects that complement their learning. For students interested in taking Drawing and Painting, Art History II does not count as a prerequisite. You must take Introduction to Art (formerly known as Foundations of Art). Prerequisite Art History I.

Prerequisites: Art History

GRAPHIC DESIGN I

Course#: 804 **Grades**: 10 -12 **Credits**: 1/2

We will combine art and technology to learn the basic principles, elements and properties of design, while gaining an introduction to the Adobe Suite: Photoshop, Illustrator and InDesign. The course will consist of, but not limited to, lectures and demonstrations, visual exercises, and projects such as, cd covers, logos, letterhead, business cards, brochures, posters. Upon successful completion of this course, you may take Graphic Design II to advance your skills to complete projects such as magazines, package design, web design, and other self-directed projects. You may also move on to take additional art courses, such as Ceramics Wheel Throwing, Ceramics Hand-building, Printmaking,

Visual Communications and Sculpture. For students interested in taking Drawing and Painting, Graphic Design I does not count as a prerequisite -- you must take Introduction to Art (formerly known as Foundations of Art).

Prerequisites: None

GRAPHIC DESIGN II

Course#: 8041 **Grades**: 10 -12 **Credits**: 1/2

In this advanced design course we will exercise the knowledge of the principles, elements and properties of design to create sophisticated design projects with the Adobe Suite: Photoshop, Illustrator and InDesign. The course will consist of, but not limited to, lectures and demonstrations, visual exercises, and projects such as, magazine layout, package design, web design, and other self-directed projects.

Prerequisites: Graphic Design I

PHOTOGRAPHY I

Course#: 8360 **Grades**: 10 -12 **Credits**: 1/2

Technology is changing the way we take, make and view photographs. Today, the worlds of traditional and digital photography are steadily merging. This course is designed for students to explore traditional, alternative and digital ways to create photographic images. After an introduction to the history, principles of photography, and mechanics of the camera, students will apply this knowledge to compose and create photographic images. In addition, all students will gain an awareness and appreciation for the art of photography and have the ability and comfort to express themselves through the medium. Course work will include, but is not limited to, a combination of photo projects, digital and printed presentations of your photographs, and research and oral presentation on a famous photographer and his/her work.

Please bring a digital SLR camera to class if you have access to one; a SD card for your camera; and a laptop computer.

Prerequisites: Introduction to Art (formerly known as Foundations of Art) or Art History







PHOTOGRAPHY II

Course#: 8362 **Grades**: 10 -12 **Credits**: 1/2

This course is designed for Photography I students to continue to explore traditional, alternative and digital ways to create photographic images. During the first quarter of the semester, students will be asked to complete and present weekly photographic assignments. During the second quarter of the semester, students will be asked to propose a

rigorous photographic assignment of their own — one that holds meaning to them and they will be fully invested in. The assignment will result in a series of a minimum of 5 final images printed, window matted and formerly presented with an artist statement. The final series will be showcased in the FHS art show which students will be required to attend and present their work to staff, family and friends who attend. Course work will include, but is not limited to, a combination of photo projects, digital and printed presentations of your photographs, critiques and research and final presentation of the images resulting from the student's independently driven project.

Please bring a digital SLR camera to class if you have access to one; a SD card for your camera; and a laptop computer.

Prerequisites: Photography I

DRAWING AND PAINTING

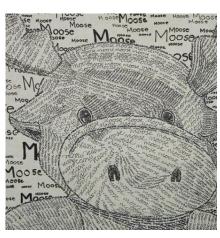
Course#: 821 **Grades**: 9-12 **Credits**: 1/2

This course gives students the opportunity to gain confidence, understanding, and versatility in making art on a two dimensional surface. Towards this goal, Drawing & Painting will break down the drawing process into a logical sequence while it introduces students to new techniques and materials. Pencil, charcoal, oil pastel, acrylic paints, and mixed media will be the primary materials used. While the emphasis of this course will focus on working from observation, there will be assignments which rely heavily on design, imagination and abstraction. In this course students are encouraged to take risks and develop their own style. Preparing a portfolio for college is another goal of this course. It is recommended that students that take Introduction to Art (formerly Foundations of Art) first semester sign up for Drawing & Painting first semester are encouraged to take Advanced Art second semester.

Prerequisites: Introduction to Art (formerly known as Foundations of Art)

* Look at the thumbnail photos to see artwork created in this course.









RECYCLED ART

Course#: 8111 **Grades**: 9-12 **Credits**: 1/2

We all have trash. Think of everything you do during the day that generates empty boxes, bottles, cans, plastic wrap, books, newspapers, magazines and other things you throw away. But did you know you can use such stuff to make 2 and 3 dimensional art? Recycled art is creative work that's made from discarded materials that once had another purpose. In this course, you will learn the history of recycled art and learn how to make new 2D and 3D artwork from old stuff. Students will work collaboratively and individually to create art using a range of recycled materials.

Prerequisites: Introduction to Art (formerly Foundations of Art), Art History or Graphic Design I.













ADVANCED ART

Course#: 824 **Grades**: 10-12 **Credits**: 1/2

Advanced Art will give students the opportunity to work on developing the skills taught in Drawing & Painting. While this course will emphasize visual image making, it is not exclusively limited to 2-dimensional work. Continued emphasis is placed on personal expression, risk taking, and technical development. Specifically painting in relief, learning to create portraits and use of Mixed Media are a few possibilities that might be explored. For students interested in developing their resume, designated time in this course's first semester will be spent creating digital images to include in college applications. It is strongly recommended that students sign up for Advanced Art and Advanced Art II making it a full year course.

Prerequisites: Introduction to Art(formerly known as Foundations of Art) and Drawing & Painting.

* Look at the thumbnail photos to see artwork created in this course.















ADVANCED ART II

Course#: 8240 **Grades**: 10-12 **Credits**: 1/2

Advanced Art II continues to individually challenge students to reach a higher level of proficiency in their drawing and painting skills. Continued emphasis will be placed on personal expression, risk taking and technical development. For students interested in embellishing their resume, designated time first semester will be spent developing digital images to include in college applications. It is strongly recommended that students sign up for Advanced Art II and Advanced Art III making it a full year course.

Prerequisites: Introduction to Art (formerly known as Foundations of Art) and Drawing & Painting

















ADVANCED ART III

Course#: 8242 **Grades**: 11-12 **Credits**: 1/2

Advanced Art III and IV continue to individually challenge students to reach a higher level of proficiency in their drawing and painting skills. Continued emphasis will be placed on personal expression, risk taking and technical development. For students interested in embellishing their resume, designated time first semester will be spent developing digital images to include in college applications. It is strongly recommended that students sign up for Advanced Art III and Advanced Art IV making it a full year course.

Prerequisites: Introduction to Art (formerly known as Foundations of Art), Drawing & Painting, Advanced Art I, Advanced Art II

ADVANCED ART IV

Course#: 8243 **Credits**: 11-12 **Credits**: 1/2





















ADVANCED ART V (Independent Study)

Course#: 8244 **Grades**: 11-12 **Credits**: 1/2

Students will design their own curriculum embellishing skills taught in previous Advanced Art courses.

Prerequisites: Studio Art (formerly known as Foundations of Art), Drawing & Painting, Advanced Art I,II,III and IV.

ART PORTFOLIO DEVELOPMENT & GUIDED INDEPENDENT STUDY

Course#: 8245 **Grades**: 11-12 **Credits**: 1/2

This first semester class is designed to individually meet the needs of students who want to develop an art portfolio or supplemental for their college application. Students will be reworking previously completed pieces as well as creating new artwork for their portfolio by building upon what they have already accomplished. This course is also designed for those students who would like to pursue a two or three dimensional independent study in the visual arts. Students interested in an independent study need department approval and are expected to be self- motivated thereby creating their own curriculum and goals for the course.

Prerequisites: Introduction to Art (formerly known as Foundations of Art), Drawing & Painting, Advanced Art

EXPLORATION of PRINTMAKING

Course#: 8480 **Grades**: 9-12 **Credits**: 1/2

Exploration of Printmaking makes a connection between fine art, photography and technology. This course combines drawing and painting skills while focusing on unique ways of transferring original drawings and photographs into multiple images. Three exciting techniques will be explored: Metal Plate Etching, Solar Plate Printmaking and Gelatin Monoprinting. The metal plate technique allows students to take original line drawings and etch them onto zinc plates using an acid solution. Solar plate printmaking allows students to experience the magic of photography. By means of using a UV sensitive light box, students watch their original Photoshop manipulated photographs transfer onto a UV sensitive plate. Gelatin Mono Printing enables students to explore painting on a sheet of gelatin creating a one-of-a-kind print. Prints will be made from all these processes. Students will learn how to alter their prints by hand coloring, stenciling and using collage. Following the traditional printing processes, students will learn how the computer can be utilized to manipulate their original prints. This course encourages strong design skills, risk taking and thinking outside the box! While students will be using a digital camera, please note that this is not a photography course.

*Look at the thumbnail photos to see artwork created in this course.

Prerequisites: Introduction to Art (formerly known as Foundations of Art), Art History or Graphic Design I





















SCULPTURE / 3- DIMENSIONAL DESIGN...

Course#: 849 **Grades**: 9-12 **Credits**: 1/2

This course will deal with the challenges of designing in 3-dimensions by using a variety of sculptural media such as: clay, paper-mache, plaster, wood, wire, foam core, found objects and cardboard. Both additive (building up) and subtractive (carving away) techniques will be used. Resolving realistic, non-objective, and abstract problems in sculpture will also be applied to student work. Although the primary considerations will be three-dimensional, color and surface treatments will be a part of some assignments.

Prerequisites: Introduction to Art (formerly known as Foundations of Art), Art History or Graphic Design I











CERAMICS: HAND BUILDING

Course#: 8150 **Grades**: 9-12 **Credits**: 1/2

Ceramics: Hand Building offers students the opportunity to explore functional, nonfunctional and sculptural ways of creating ambitious containers/vessels and platters using the three basic building techniques in clay: pinch, coil and slab. The projects will emphasize not only technique, but will also explore design, form and surface treatment.

Prerequisites: Introduction to Art (formerly Foundations of Art), Art History or Graphic Design I *Look at the thumbnail photos to see artwork created in this course.





















ADVANCED HAND-BUILDING CERAMICS

Course#: 8160 **Grades**: 10-12 **Credits**: 1/2

Using advanced hand building techniques, students will be challenged to reach a higher level of proficiency and personal expression in clay. Students will continue to explore mixing glazes and a variety of surface treatments in order to enhance their vessel's form.

Prerequisites: Introduction to Art (formerly Foundations of Art) or Art History, and Hand-Building Ceramics

CERAMICS: WHEEL THROWING

Course#: 8110 **Grades**: 10-12 **Credits**: 1/2

This is a beginning course emphasizing the creation of vessels on the potter's wheel while introducing students to the properties and uses of clay. Students will make both functional and sculptural clay works using the wheel. Through a focus on the integration of form and surface, students will gain knowledge and skill in the ceramic arts.









Prerequisites: Introduction to Art (formerly Foundations of Art)

CERAMICS: ADVANCED WHEEL THROWING

Course#: 8130 **Grades**: 10-12 **Credits**: 1/2

This course offers students an opportunity to improve their wheel throwing skills while focusing on developing a personal style. Using advanced throwing, building, and glazing techniques students will be challenged to make larger and more precise work. We will explore and learn about different clay bodies and firing techniques. Through research, reflection, and discussion students will gain familiarity with both the history of and current trends in the ceramic arts.

Prerequisites: Wheel Throwing

HEALTH & PHYSICAL EDUCATION

All 9th graders are required to take Physical Education I.

The five PE electives are open to grades 10-12 to be taken once to fulfill their PE credit.

Physical Education Teaching Assistants are available as an elective for 12th graders.

All students are required to take Health I.

PHYSICAL EDUCATION 1

Course#: 9092 **Grade:** 9 **Credits**: 1/2

This course is a prerequisite for all the other classes in the Physical Education program, should be taken freshman year, and is designed to introduce students to Physical Education. Along with learning about Fitness's basic principles, each student will take the Physical Fitness Fitnessgram Test and create a personal fitness program for themselves. This class will give students the opportunity to become familiar with the PE facilities at the high school, including the cardio and weight room, as well as experiencing a wide variety of fitness and motor skill activities.

Prerequisites: None

RECREATIONAL GAMES (ACTIVITIES AND PERSONAL FITNESS)

Course#: 9032 **Grade**: 10-12 **Credits**: 1/2

This course is designed to promote lifetime physical activity. Activities will vary from dual in nature to group games, but the main focus will be on developing physical fitness through physical activity. Students will be encouraged to improve their skill levels, develop good character and sportsmanship in their gameplay, and develop an atmosphere

of fun and enjoyment of recreation and personal fitness. Activities may include but are not limited to bocce, badminton, camp games, disc golf, matball, pickleball, scooters, and personal workouts. Students will take the Physical Fitness Fitnessgram Test.

Prerequisites: Physical Education I

YOGA AND PERSONAL FITNESS

Course #: 90566 **Grade:** 10-12 **Credits:** 1/2

This course is designed for students looking to improve their overall health and fitness. The focus will be on developing a healthy, active lifestyle. Stress reduction, flexibility, and strength will be developed with weekly yoga sessions. Students will be required to create personal programs using kettlebells, Tabata and HIIT programs, walking, jogging, snowshoeing, and various cardio and strength training equipment throughout the semester. Students will take the Physical Fitness Fitnessgram Test.

Prerequisites: Physical Education 1

RACQUET SPORTS AND NET GAMES and PERSONAL FITNESS

Course #: 9072 **Grade:** 10-12 **Credits:** 1/2

Students will have the opportunity to learn the fundamentals, rules, and strategies of tennis, badminton, pickleball, volleyball, and table tennis. Whether learning the skills for the first time or working to perfect their game, all students will have the opportunity to raise their skill level and pursue lifelong enjoyment of these activities. A variation of these sports will also be played, such as 4 Way Volleyball. Recreation games or fitness may be offered if the schedule or weather prohibits the use of equipment. Students will take the Physical Fitness Fitnessgram Test.

Prerequisites: Physical Education 1

TEAM SPORTS

Course#: 9033 **Grade**: 10-12 **Credits**: 1/2

This course is designed to allow students a wide variety of physical activities. Each unit is designed to allow the students to learn and improve the necessary skills, rules, and strategies of various team sports. Sports will include but are not limited to Soccer, Football, Basketball, Dodgeball, Floor Hockey Pickleball, Softball, Badminton, and Volleyball. Each student will take the Physical Fitness Fitnessgram Test.

Prerequisites: Physical Education I

ADVANCED FOUNDATIONS OF PERSONAL FITNESS

Course#: 8712 **Grade:** 10-12 **Credits:** 1/2

The Strength & Conditioning Curriculum focuses on developing & improving health-related fitness, including muscular strength, muscular endurance, cardiovascular endurance, flexibility, and Improved body composition. Also, skill-related fitness includes agility, balance, coordination, speed, reaction time, and explosive power. Students enrolled in this class should have a strong desire to increase their overall total body strength and fitness. The class will be fast-paced with intense daily workouts.

Prerequisites: Physical Education I

ATHLETIC ADMINISTRATION

Course #: 9040 **Grades:** 11-12 **Credit:** ½ (fall 2021)

This class does not count towards your 1 Credit or 1/2 Credit requirement.

A study of those procedures necessary for the effective organization and administration of an athletic department. Included will be a discussion of budget, management styles, eligibility, scheduling, purchasing and inventory, legal liability and office management.

Prerequisite: None

HEALTH

Course#: 521 Grade: 10 Credits: 1/2

This course is designed to help high school students develop more awareness and responsibility regarding their personal health and well being. We will focus on the relationship that exists between physical, mental, and social health. Topics will include mental/emotional health, causes, and prevention of disease, nutrition, social media literacy, sexuality, and substance abuse. Emotional health and self-governance will be the underlying themes of this course. Successful completion of this course is required for graduation.

It is preferred that this course be taken in grade 10 but can be taken in grades 11 or 12 if necessary to meet the health requirement.

Prerequisites: None

WORLD LANGUAGES

The World Language Department offers sequential programs in French, Spanish, and Latin. Students who complete the sequence of study of Spanish or French during the elementary and/or middle school years will be placed in the appropriate high school level based on teacher recommendation and proficiency. All other students shall enroll in level one in Latin or French. High School World Language classes are offered in a four-year sequence with specific prerequisites. All course offerings are subject to enrollment requests and available staff.

Honors courses are accelerated courses and are offered starting with Latin I Honors, French II Honors and Spanish II Honors. Honors courses follow an accelerated curriculum, pacing them beyond the regular courses and require more in-depth study on the part of the student. For example, French II Honors covers most of the regular French II and French III curriculum. Proficiency Standards for the French and Spanish courses focus on Culture and the three modes of communication: Interpretive(reading and listening), Interpersonal (conversational) and Presentational (written or oral). Latin courses focus on the Interpretive, Presentational and Culture standards.

FRENCH I

Course#: 301 Grade: 9-12 Credits: 1

This is an introductory course intended for students who have had little or no exposure to the French language. Students will learn to communicate on familiar topics, both in writing and orally, using a variety of memorized and practiced vocabulary and phrases. Students will also be able to understand highly predictable, formulaic language, both orally and in writing. Additionally, students will explore some products, practices and perspectives of the francophone world and compare them to those of their own culture. The proficiency goal at the end of this course is Novice Mid.

Prerequisites: None

FRENCH II

Course#: 3141 **Grade**: 9-12 **Credits**: 1

This course is a continuation of French I. Students will continue to explore cultural topics while building their proficiency in both spoken and written French. Students will extend their skills and communicate and exchange information about familiar topics using phrases and simple sentences, sometimes supported by memorized language. Additionally, students will begin to handle short social interactions in everyday situations by asking and answering simple questions. Students will also learn to present basic information on familiar topics using practiced language that include phrases and simple sentences. They will also be able to write short messages and notes on familiar topics related to everyday life. In addition, students will be able to extract main ideas and occasional details from oral and written texts, and begin to make inferences. The proficiency goal at the end of this course is Novice High.

Prerequisites: Student has met each standard of French I to the novice mid level, or has ended previous studies of French to the Novice Mid level, or teacher recommendation based on a proficiency assessment.

FRENCH II Honors

Course#: 3151 **Grade**: 9-12 **Credits**: 1

This accelerated course is designed for students who have a strong mastery of the Falmouth Middle School French curriculum, (or its equivalent), and a desire to move through their study of French at a deeper level and a faster pace. In addition to expanding their cultural knowledge through increasingly complex authentic materials, students will develop their communicative skills and participate in conversations on a number of familiar topics by asking and answering a variety of questions and using strings of simple sentences. Students will also begin to create their own messages, orally and in writing, to present information using high frequency and personalized vocabulary in a series of sentences. Students will be able to understand the main idea in short, simple oral presentations on familiar topics as well as extract main ideas and details from written texts, and begin to make inferences. By the end of this course, students should show awareness of, and occasionally be able to communicate about events in the present, past and future. The proficiency goal at the end of this course is Intermediate Low.

Prerequisites: Student has achieved the Novice High level for each standard in previous studies of French, or teacher recommendation based on a proficiency assessment.

FRENCH III

Course#: 3211 **Grade**: 10-12 **Credits**: 1

This course is the continuation of French II. In addition to expanding their cultural knowledge through increasingly complex authentic materials, students will develop their communicative skills and participate in conversations on a number of familiar topics using simple sentences. The students' ability with the language will expand to include the handling of short social interactions in everyday situations by asking and answering more complex questions. Students will also begin to create their own messages using high frequency and personalized vocabulary in a series of sentences to present information orally and in writing. Students will be able to understand the main idea in short oral presentations on familiar topics as well as extract main ideas and details from written texts, and begin to make inferences. By the end of this course, students should show awareness of, and occasionally be able to communicate about events in the present, past and future. The proficiency goal at the end of this course is Intermediate Low.

Prerequisites: Student has successfully completed French II (met each standard to the Novice High level), or teacher recommendation based on a proficiency assessment.

FRENCH III Honors

Course#: 3201 **Grades**: 10-12 **Credits**: 1

This course is the continuation of French II Honors. This course emphasizes more communication, writing, reading, and presentational skills. The primary goal of the course is understanding and communicating in the target language at a substantially higher degree of proficiency than in previous levels of French. Students study more advanced vocabulary, expressions and grammatical structures, read in depth texts concerning cultural aspects of francophone countries, analyze literary pieces and produce original compositions and oral presentations. The proficiency goal for this course is Intermediate High.

Prerequisites: Students have successfully completed French II Honors (met each standard to the Intermediate Low level), or or teacher recommendation based on a proficiency assessment.

FRENCH IV

Course#: 3251 **Grades**: 11-12 **Credits**: 1

This course is a continuation of French III. In addition to adding to their knowledge of the practices, perspectives and products of the French-speaking world, students will become comfortable participating in conversations on familiar topics using a variety of strategies: creating their own meaning using a series of sentences, asking and answering a variety of questions, and including comments and reactions in their conversation. Students will be able to make oral and written presentations on a wide variety of familiar topics using connected sentences. They will also begin to use different time frames to narrate an event. Students will also apply a variety of comprehension strategies to understand the main ideas and infer the author's intent in messages and presentations on a variety of topics related to everyday life and personal interests and studies. Students will also understand the message in conversations they overhear. Students at this level are consistently accurate in the present tense and are beginning to use past and future time frames. They can be understood by native speakers accustomed to interacting with language learners. Successful completion of this course will result in an Intermediate Mid level of proficiency, which is the graduation standard recommended for Modern and Classical Languages for the State of Maine.

Prerequisites: Student has successfully completed French III (met each standard the Intermediate Low level) , or teacher recommendation based on a proficiency assessment.

FRENCH PRE-AP

Course#: 3241 **Grade**: 11-12 **Credits**: 1

This course offers the student an opportunity to study French at an advanced level. The course will be taught in French and will focus on creating proficiency in the French language through a broad study of French literature and through practice and skill building in listening, speaking, reading and writing. This is a challenging course for able and motivated students who want to increase their proficiency in spoken and written language.

Prerequisites: Students have successfully completed French III Honors, (met each standard of to the Intermediate high level), or teacher recommendation based on a proficiency assessment..

FRENCH V ADVANCED CONVERSATION

Course#: 3291 Grade: 12 Credits: 1

This course focuses on all three communicative modes (interpretive, interpersonal and presentational) with particular emphasis on understanding and speaking French. Through authentic texts and music, contemporary topics, movies and interactive communicative activities the students will develop the ability to think and speak in French while learning about Francophone cultures. Students will participate in conversations about familiar topics that go beyond everyday life and will talk in an organized way and with some detail about events and experiences in various time frames. Students will also work on building communicative strategies to be able to handle a familiar situation with an unexpected complication. In addition, students will also engage in reading circles and will follow stories and descriptions of some length and in various time frames and genres. Compositions will also provide opportunity to focus on written communication. Grammar review will be ongoing and directly tied to communicative activities. The proficiency goal for this course is Advanced Low.

Prerequisites: Students have met each standard of French IV or French Pre-AP or teacher recommendation based on a proficiency assessment.

AP FRENCH LANGUAGE

Course#: 330 Grade: 12 Credits: 1

This course offers the student an opportunity to study French at an advanced level. The course will be taught in French and will focus on creating proficiency in the French language through a broad study of French literature and through practice and skill building in listening, speaking, reading and writing. This is a challenging course for able and motivated students who want to increase their proficiency in spoken and written language.

AP examinations are administered in May.

Prerequisites: French IV Honors (mastery of material) and/or permission of instructor.

LATIN I

Course#: 341 **Grades**: 9-12 **Credits**: 1

This is an introductory course intended for students who have had little or no exposure to Latin or foreign languages in general. This course introduces the basic concepts of Latin focusing on the grammar, vocabulary, and also Greco-Roman culture and myth. Learning comes primarily from translating ancient myths and histories. There is less emphasis on speaking and listening than in modern language courses. We will also draw comparisons to English vocabulary and grammar, as well as learning Latin root words in English.

Prerequisites: None

LATIN I Honors

Course#: 3411 Grades: 9-12 Credits: 1

This course is intended for students who have shown confidence, proficiency, and interest in previous foreign language courses. It assumes no prior knowledge of Latin itself. This course introduces the basic concepts of Latin focusing on the grammar, vocabulary, and also Greco-Roman culture and myth. Learning comes primarily from translating ancient myths and histories. There is less emphasis on speaking and listening than in modern language courses. We will also draw comparisons to English vocabulary and grammar, as well as learning Latin root words in English.

Prerequisites: None

LATIN II

Course#: 342 Grades: 10-12 Credits: 1

Latin II builds on Latin I grammar and vocabulary with emphasis placed on understanding the many intermediate grammatical constructions and Latin vocabulary. The course also includes readings which teach ancient mythology and Greco-Roman civilization. We will also draw comparisons to English vocabulary and grammar, as well as learning Latin root words in English.

Prerequisites: Latin I

LATIN II Honors

Course#: 3422 **Grades**: 10-12 **Credits**: 1

Latin II builds on Latin I grammar and vocabulary with emphasis placed on understanding the many intermediate grammatical constructions and Latin vocabulary. The course also includes readings which teach ancient mythology and Greco-Roman civilization. We will also draw comparisons to English vocabulary and grammar, as well as learning Latin root words in English. Latin II Honors will cover the material and units in more depth and at a faster rate than Latin II.

Prerequisites: Latin I Honors or recommendation of teacher

LATIN III

Course#: 345 **Grades**: 10-12 **Credits**: 1

Latin III builds on Latin II grammar and vocabulary with emphasis placed on understanding the many advanced grammatical constructions and Latin vocabulary. The course also includes readings which teach ancient mythology and Greco-Roman civilization. We will also draw comparisons to English vocabulary and grammar, as well as learning Latin root words in English. Furthermore, Latin III focuses on the process of reading Latin literature, translating Latin myths and Latin history from original ancient sources. Students study and/or review Latin vocabulary and advanced grammar necessary for translations. History, politics, mythology, culture, and life in ancient times are examined through the readings.

Prerequisites: Latin II or Latin II Honors

LATIN III Honors

Course#: 3451 **Grades**: 10-12 **Credits**: 1

Latin III builds on Latin II grammar and vocabulary with emphasis placed on understanding the many advanced grammatical constructions and Latin vocabulary. The course also includes readings which teach ancient mythology and Greco-Roman civilization. We will also draw comparisons to English vocabulary and grammar, as well as learning Latin root words in English. Furthermore, Latin III focuses on the process of reading Latin literature, translating Latin myths and Latin history from original ancient sources. Students study and/or review Latin vocabulary and advanced grammar necessary for translations. History, politics, mythology, culture, and life in ancient times are examined through the readings. Latin III-Honors will cover the material and units in more depth and at a faster rate than Latin III.

Prerequisites: Latin II Honors, or recommendation of the teacher.

Latin IV

Course#: 346 Grade: 12 Credits: 1

Latin IV concentrates on reading original Latin works and exploring them in applicable historical and societal contexts. Advanced grammar learning is based on topics and concepts acquired in previous Latin levels. Readings may include selections from Caesar, Virgil, Livy, Catullus, Horace, Ovid, and Milne.

Prerequisites: Latin III or permission from the instructor

LATIN IV Honors

Course#: 3461 Grades: 12 Credits: 1

Latin IV Honors concentrates on reading original Latin works and exploring them in applicable historical and societal contexts. Advanced grammar learning is based on topics and concepts acquired in previous Latin levels. Readings

may include selections from Caesar, Ovid, Cicero, Virgil, Livy, Catullus, Horace, and Milne. Latin IV-Honors will cover the material and units in more depth and at a faster rate than Latin IV.

Prerequisites: Latin III-Honors, or permission from the instructor

SPANISH II

Course#: 3822 **Grades**: 9-12 **Credits**: 1

Students will continue to explore cultural topics while building their proficiency in both spoken and written Spanish. Students will extend their skills and communicate and exchange information about familiar topics using phrases and simple sentences, sometimes supported by memorized language. Additionally, students will begin to handle short social interactions in everyday situations by asking and answering simple questions. Students will also learn to present basic information on familiar topics using practiced language that include phrases and simple sentences. They will also be able to write short messages and notes on familiar topics related to everyday life. In addition, students will be able to extract main ideas and occasional details from oral and written texts, and begin to make inferences. The proficiency goal at the end of this course is Novice High.

Prerequisites: Student has ended previous studies of Spanish to the Novice Mid level, or teacher recommendation based on a proficiency assessment.

SPANISH II Honors

Course#: 3823 Grades: 9-12 Credits: 1

This accelerated course is designed for students who have a strong mastery of the Falmouth Spanish elementary and middle school curriculum, (or its equivalent), and a desire to move through their study of Spanish at a deeper level and a faster pace. In addition to expanding their cultural knowledge through increasingly complex authentic materials, students will develop their communicative skills and participate in conversations on a number of familiar topics by asking and answering a variety of questions and using strings of simple sentences. Students will also begin to create their own messages, orally and in writing, to present information using high frequency and personalized vocabulary in a series of sentences. Students will be able to understand the main idea in short oral presentations on familiar topics as well as extract main ideas and details from written texts and begin to make inferences. By the end of this course, students should show awareness of, and occasionally be able to communicate about events in the present, past and future. The proficiency goal at the end of this course is Intermediate Low.

Prerequisites: Student has exceeded all communication standards to the Novice High level

SPANISH III

Course#: 3831 **Grades**: 10-12 **Credits**: 1

This course is the continuation of Spanish II. In addition to expanding their cultural knowledge through increasingly complex authentic materials, students will develop their communicative skills and participate in conversations on a number of familiar topics using simple sentences. The students ability with the language will expand to include the handling of short social interactions in everyday situations by asking and answering more complex questions. Students will also begin to create their own messages using high frequency and personalized vocabulary in a series of

sentences to present information orally and in writing. Students will be able to understand the main idea in short oral presentations on familiar topics as well as extract main ideas and details from written texts, and begin to make inferences. By the end of this course, students should show awareness of, and occasionally be able to communicate using, past, present, and future tenses. The proficiency goal at the end of this course is Intermediate Low.

Prerequisites: Student has successfully completed Spanish II (Novice High level), or teacher recommendation based on a proficiency assessment.

SPANISH III Honors

Course#: 3841 **Grades**: 10-12 **Credits**: 1

This course is the continuation of Spanish II Honors. By the end of this course students will be able to participate with ease and confidence in conversations on familiar topics and talk about events and experiences in various time frames. Students will also be able to handle social interactions in everyday situations, sometimes even when there is an unexpected complication. Students will be asked to make presentations, orally and in writing, on school, work, and community topics, as well as on topics they have researched. Some of these presentations will ask the students to share information on events and experiences in various time frames. Students will be asked to read more complex texts and they will easily understand the main idea in messages and presentations on a variety of topics related to everyday life and personal interests and studies. They will also be asked to read stories and descriptions about events and experiences in various time frames. The students will also work on their comprehension of oral messages and be able to understand a few details of what they hear, even when something unexpected is expressed or the message is about events in various time frames. All units will include an exploration of the practices, products and perspective of the Spanish-speaking world.

The proficiency goal for this course is Intermediate High.

Prerequisites: Students have successfully completed Spanish II Honors (met each standard to the Intermediate Low level), or or teacher recommendation based on a proficiency assessment.

SPANISH IV

Course#: 3851 Grades: 11-12 Credits: 1

This course is a continuation of Spanish III. In addition to adding to their knowledge of the practices, perspectives and products of the Spanish-speaking world, students will become comfortable participating in conversations on familiar topics using a variety of strategies: creating their own meaning using a series of sentences, asking and answering a variety of questions, and including comments and reactions in their conversation. Students will be able to make oral and written presentations on a wide variety of familiar topics using connected sentences. They will also begin to use different time frames to narrate an event. Students will also apply a variety of comprehension strategies to understand the main ideas and infer the author's intent in messages and presentations on a variety of topics related to everyday life and personal interests and studies. Students will also understand the message in conversations they overhear. Students at this level are consistently accurate in the present tense and are beginning to use past and future time frames. They can be understood by native speakers accustomed to interacting with language learners. Successful completion of this course will result in an Intermediate Mid level of proficiency, which is the graduation standard recommended for Modern and Classical Languages for the State of Maine.

Prerequisites: Student has successfully completed Spanish III (met each standard to the Intermediate Low level), or teacher recommendation based on a proficiency assessment.

SPANISH PRE-AP

Course#: 3861 **Grades**: 11-12 **Credits**: 1

Pre-AP Spanish is a Pre-AP course emphasizing more communication, writing, reading and presentational skills. The primary goal of the course is understanding and communicating in the target language at a substantially higher degree of proficiency than in previous levels of Spanish. Students study more advanced vocabulary, expressions and grammatical structures, read in-depth texts concerning cultural aspects of Spanish-speaking countries, analyze literary pieces and produce original compositions and oral presentations.

Prerequisites: Student has successfully completed Spanish III Honors (met all the standards to the Intermediate High level), or teacher recommendation based on a proficiency exam.

SPANISH V ADVANCED CONVERSATION

Course#: 3891 Grade: 12 Credits: 1

This course, a continuation of Intermediate Spanish Honors, focuses on all three communicative modes (interpretive, interpersonal and presentational) with particular emphasis on understanding and speaking Spanish. Through authentic texts and music, contemporary topics, movies and interactive communicative activities the students will develop the ability to think and speak in French while learning about Hispanic cultures. Students will participate in conversations about familiar topics that go beyond everyday life and will talk in an organized way and with some detail about events and experiences in various time frames. Students will also work on building communicative strategies to be able to handle a familiar situation with an unexpected complication. In addition, students will also engage in reading circles and will follow stories and descriptions of some length and in various time frames and genres. Compositions will also provide opportunity to focus on written communication. Grammar review will be on-going and directly tied to communicative activities. The proficiency goal for this course is Advanced Low.

Prerequisites: Students will have met each standard of Spanish III or Spanish Pre-AP, or teacher recommendation based on a proficiency assessment.

AP SPANISH LANGUAGE

Course#: 390 Grade: 12 Credits: 1

This course offers the student an opportunity to study Spanish at an advanced level. The course will be taught in Spanish and will focus on creating proficiency in the Spanish language through a broad study of Spanish language literature and through practice and skill building in listening, speaking, reading and writing. This is a challenging course for able and motivated students who want to increase their proficiency in spoken and written language.

AP examinations are administered in May.

Prerequisites: Successful completion of Pre-AP Spanish (mastery of material) and/or permission of instructor.

POP UP AMERICAN SIGN LANGUAGE for BEGINNERS

Course#: P0350 Grade: 9-12 Credits: ¼ per term

American Sign Language (ASL) for Beginners introduces students to the language and culture of Deaf persons in the United States. Students will explore basic/novice vocabulary, structure, syntax and grammar. Students will gain fluency with fingerspelling, greetings, numbers, colors, weather, question words, personal and possessive pronouns, and other high frequency terms/expressions, such as discussing family and daily routines. Students will also learn conversational/cultural behaviors of native ASL users, such as facial grammar and humor to hold a beginning-level conversation in ASL. Students will participate extensively in interactive classroom activities.

Prerequisites: none

OTHER OPPORTUNITIES

INDEPENDENT STUDY

Course#: IS000, IS005 Grade: 10-12 Credits: See Below

An independent study allows students to explore an academic area of interest that is not offered at Falmouth High School. Students will be required to collaborate with a high school faculty member as a mentor to assist in the planning and assessment of the study. Independent study opportunities do not satisfy graduation requirements. Applications for independent study projects are available from a guidance counselor.

Semester - 1/2 Credit Full Year - 1 Credit

Prerequisites: None

LEADERSHIP SEMINAR (Honors option is available)

Course#: 4111 **Grade**: 10-12 **Credits**: 1

Please note: There is an Honors option available when taking this course.

Students in this course will be tasked with **developing and running a successful SAiL event for their peers.** Students will actively assume all responsibilities for the organization of SAiL, including maintaining open lines of communication about SAiL with students, staff, parents, and community members, using multiple media platforms, organizing a session fair, supporting session leaders, overseeing the SAiL signup process, organizing fundraising events, and maintain accurate financial records for all of the SAiL sessions. In addition, each student in the course will design two SAiL sessions that will be included in the SAiL offerings. Key skills stressed in this class will include writing emails, effective communication skills, creating google surveys, drawing conclusions based on survey responses and data, and basic accounting and finance skills. The goal for the first year will be to increase community involvement in SAiL. Each student will reach

out to multiple stakeholders in the community in the hope of having several sessions led or supported by community members.

Honors option available

Full Year - 1 Credit

Prerequisites: None

UNIVERSITY OF MAINE SYSTEM EARLY COLLEGE PROGRAM

Course #: UM 004 **Grades**: 11-12

Falmouth High School students are eligible to take college courses both in person and online through the University of Maine system. In order to take advantage of this opportunity, FHS students must obtain approval from their school counselor and be in good academic standing (generally a B average or better). Tuition and most fees are waived for the first 12 credits (generally 4 classes) per year. These courses carry college credit and appear on the student's university transcript. However, they are not listed on the Falmouth transcript unless the course is taken to fulfill a graduation requirement.

For more information: https://www.maine.edu/students/early-college/

*A number of other early college opportunities exist. Please consult with your school counselor and note that college classes taken outside the University of Maine system are also not posted to the Falmouth High School transcript unless they are taken to fulfill a graduation requirement.

TEACHER ASSISTANT

Course#: ISTACS Grades 9-12 Credit: Community Service only (Tier 1)
Course#: ISTA-sem Grades: 11-12 Credit: ½ (Tier 2 or 3 -sr only)
Course#: ISYA-yr Grades: 11-12 Credit: 1.0 (Tier 2 or 3 - sr only)

TEACHER ASSISTANT GUIDELINES

Teaching Assistant Program: A program which will focus on student growth while providing a positive educational experience.

To be a Teaching Assistant (TA) students must have permission from a classroom teacher. There is no expectation a teacher must have a TA. At the beginning of the year or semester the teacher and the TA will meet to discuss the individual goals and expectations for the experience.

All students will be required to fill out an application to be a TA. Forms will be available in the Guidance office.

Tier 1

- Open to all students in grades 9-12.
- Students must attend an agreed number of classes.
- Help with administrative tasks (e.g. photocopying, handing out materials/papers/tests, setting up classrooms/labs)
- Other miscellaneous tasks. NO grading.
- Students will receive community service credit based upon the number of hours completed.

Tier 2

- Prerequisite: Students must be a Junior or Senior and have completed the class in which they will TA.
- Tasks may include: helping students during class/lab time; helping students in need of extra help or who have been absent; collecting assignments; taking class notes; classroom setup; and, miscellaneous administrative tasks (excluding grading).
- Students will be graded on a Pass/Fail basis, and will receive 1 credit for a year long course or ½ credit for a semester course (grades will be entered by the classroom teacher).
- This course counts toward the overall graduation credits but will not count towards the content area in which the student is helping as TA (e.g. English, Science).

Tier 3

- Prerequisite: Student must be a Senior who has completed the class / course in which he or she will TA.
- Tasks may include: helping students during class/lab time; helping students in need of extra help or who have been absent; designing review activities; collecting assignments; taking class notes; classroom set up; and miscellaneous administrative tasks (excluding grading).
- Students will teach a portion of at least 2 lessons in a semester course and 4 in a year course.
- Students will be graded on a Pass/Fail basis, and will receive 1 credit for a year course or ½ credit for a semester course (grades will be entered by the classroom teacher).
- This course will count towards the overall graduation credits but will not count towards the content area in which the student is helping as a TA.

*** Teacher Assistants may not grade other students' work under any circumstances. (FERPA regulations)

The Humanities Program at Falmouth High School is designed to provide alternative educational opportunities for students needing academic flexibility to create individualized pathways to graduation. Classes offered through The Humanities Program are considered mainstream courses and are taught at the college preparatory level. They are unique in that they offer small class size, integrated studies and student centered curriculum design.

Administrator a	and tead	<u>cher refer</u>	<u>ral is re</u>	<u>quired</u>	<u>to enroll i</u>	<u>n these</u>	Humanities	courses.

HUMANITIES I

Course # P1011 Grade: 10 Credits: 2

This two credit course meets the curriculum requirements of English II (1 credit) as well as 20th Century World History (.5 credit) and Civics and Government (.5 credit). It is an interdisciplinary course that integrates the study of literature (fiction and nonfiction), writing, social studies and history. Additional emphasis is placed on class participation, research, and the improvement of critical thinking skills. Topics of study for Semester 1 include the constitutional basis of the U.S. government, political culture, political parties, civil and criminal law and socioeconomics. Semester 2 topics include WWII, the Holocaust, and a general exploration of the political, economic and social history of Europe and Africa during the 20th century. In addition to various non-fiction texts, titles studied include *12 Angry Men*, *The Boy in the Striped Pajamas*, and *A Long Way Gone*.

Prerequisites: None		

HUMANITIES II

Course #: P1021 Grade: 11 Credits: 2

This two credit course meets the curriculum requirements of English III (1 credit) and American History (1 credit). It is an interdisciplinary course that integrates the study of literature (fiction and nonfiction), writing, social studies, and history. Emphasis is placed on class participation, research and the improvement of critical thinking skills. Topics of study include immigration, the Progressive Era, the Roaring 20's, the Great Depression, the U.S. homefront during WWII, and the post WWII era in the United States. In addition to various non-fiction texts, titles studied include *Our Town, The Great Gatsby, Of Mice and Men*, and *Death of a Salesman*.

Prerequisites: None

HUMANITIES III: Senior Seminar-The Human Experience

Course #: P1022 Grade: 12 Credit: 1 (English)

This full year, senior level course will examine the universality of the human experience. Topics to be covered will include major themes such as bias, love, loss, fear, courage, relationships, morality, and the potential conflicts that could lie within each of these experiences. It will follow a seminar format with emphasis placed on in-depth class discussion of selected topics using film, short fiction and nonfiction pieces as platforms for this discussion. Students

will also be asked to write so within the topics of study.	everal piece	s, including the	e college essay, that	: analyze and refle	ect on their own expo	eriences
Prerequisites: None						
HUMANITIES IV -	Senior	Seminar	- Personal E	xploration	& Capstone	
Project (not offer	ed 202	1/22)				
Course #: P1023	Grade:	12	Credit: .5 (E	nglish)		
This semester-long senior lemaintaining focus on the cospeaking. Students will be addended and the code and the code and the connections with this project will involve both the code and t	re standard asked to des tion of a per thin the FHS	s of the FHS Ending in the second passion and local com	nglish curriculum - r nt and formally preso . Students will work nmunity, and finalize	reading, writing, la ent an individual o closely with the so e project compone	inguage, listening an capstone project tha upervising faculty to	nd it set
PERSONAL FINAN						
Course # : P6001	Grades:	11 -12	Credits:1/2			
Personal Finance is a course Topics covered include inco students with sound financi	me, saving, al principles	investing, bud	geting, debt, and m	narketing awarene	ess. This course will	provide

independence. This course will earn general elective credit.

Prerequisites: None

PERSONAL FINANCE II (not offered 2021/22)

Grade: 11-12 Credit: ½ Course #: P6011

Personal Finance II is a course designed to help students understand the real world impact of their financial choices. Topics covered include income, saving, investing, budgeting, debt, and marketing awareness. This course will provide students with sound financial principles for making informed personal financial decisions guiding them to financial independence. This course will earn general elective credit. This course has no prerequisite and will cover additional topics in personal finance not covered in Personal Finance I.

Prerequisites: None

Interdisciplinary Studies

GRAPHIC DESIGN I

Course#: 804 **Grades**: 9 -12 **Credits**: 1/2

We will combine art and technology to learn the basic principles, elements and properties of design, while gaining an introduction to the Adobe Suite: Photoshop, Illustrator and InDesign. The course will include lectures and demonstrations, visual exercises, and projects such as, cd covers, logos, letterhead, business cards, brochures, posters. Upon successful completion of this course, you may take Graphic Design II to advance your skills to complete projects such as magazines, package design, web design, and other self-directed projects. You may also move on to take additional art courses, such as Ceramics Wheel Throwing, Ceramics Hand-building, Printmaking, Visual Communications and Sculpture. For students interested in taking Drawing and Painting, Graphic Design I does not count as a prerequisite -- you must take Introduction to Art (formerly known as Foundations of Art).

Prerequisites: None

GRAPHIC DESIGN II

Course#: 8041 **Grades**: 9 -12 **Credits**: 1/2

In this advanced design course we will exercise the knowledge of the principles, elements and properties of design to create sophisticated design projects with the Adobe Suite: Photoshop, Illustrator and InDesign. The course will include lectures and demonstrations, visual exercises, and projects such as magazine layout, package design, web design, and other self-directed projects.

Prerequisites: Graphic Design I

ART HISTORY

Course#: 803 **Grades**: 9-12 **Credits**: 1/2

This studio art course will teach students about art and artists who worked from prehistoric times to the present day. We will examine the impact of imagination and creativity on society. Important works of art and influential movements will be presented and discussed through slide lectures, digital presentations, virtual museum visits, documentary videos, and written testimonials by artists. Students will participate in studio art experiences, and have class discussions about their own artworks and ideas based on information learned throughout the course. For students interested in taking Drawing and Painting, Art History does not count as a prerequisite. You must take Introduction to Art (formerly known as Foundations of Art).

ART HISTORY II

Course#: 8031 **Grades**: 9-12 **Credits**: 1/2

This is a continuation of Art History with an emphasis on contemporary and non-Western art. We will begin with a brief overview of the 18th century, then move through to the twenty-first century. Students will research and investigate the current art world, while learning about installation, performance and new media arts. This course will also discuss non-Western artworks in their cultural context, and how they have contributed to the global art world. Students will be expected to participate in discussions and create studio projects that complement their learning. For

students interested in taking Drawing and Painting, Art History II does not count as a prerequisite. You must take Introduction to Art (formerly known as Foundations of Art). Prerequisite Art History I.

Prerequisites: Art History

PROJECT GREENHOUSE

Course #: 5473 **Grades:** 9-12 **Credit:** 1/2

Project Greenhouse provides students with the opportunity to understand and use engineering design principles in an immersive, authentic, hands-on learning experience. Why greenhouses? How do you position a greenhouse in consideration of the land itself, sun, and other variables? How do you plan for and build a structure that will endure? What choices about materials will impact usage? These are just some of the questions the Project Greenhouse Class will engage with as they plan and build greenhouses, and document the transformation of our school campus. The class will meet primarily on student virtual days between mid-November and February and be available for .5 science or elective credit."

Prerequisite: None

GARDEN/ORCHARD DESIGN & PRODUCTION (Honors option available)

Course #: 5474 **Grades:** 9-12 **Credit:** 1/4

Honors Course #: 5475 Grades: 9-12 Credit: ¼

This is an interdisciplinary class unlike other classes here at FHS. It is designed to allow students to learn the principles of sustainable food production and environmental land stewardship in a hands-on way while providing students the opportunity to complete a real-world, meaningful project.

The course will be divided into 4 quarters (.25 credit per quarter) following the rhythm of the seasons. Students are encouraged to make the class fit their schedule, but must sign up for the course by semester, and will be in a study hall when not enrolled in the class.

Students will design and carry out a project on their own or with a partner. One class per week will be devoted to class group work, and the rest of the time students will work independently on their project. Grading will be based on progress check-ins during the quarter, and the final product can take the form of a presentation, poster, video or some other mode presented during the end-of-quarter exhibition. Students will be involved in all aspects of project design and assessment.

Students may take the course multiple times, and the completed projects can serve as the basis for entries into academic exhibitions or competitions, such as the Maine State Science Fair or the Junior Science and Humanities Symposium. Talk to Mr. Njaa, Farmer Justin or Ms. Rodway for more information.

Below are some example options:

• Fall-Winter Quarters 1 & 2: Tend the garden, reap the harvest, measure the output of the garden. What is the productivity of the garden? What is the nutritional value of each crop grown? What was the weather and climate like during the semester? Measure the temperature, light, weather, rain, soil nutrients and conditions. What can we learn from these measurements? What has this land been used for historically? Has it always been cropland? Woods? Fields? Who was here 100 years ago? 500? 1000? What is the physical makeup of the land, the climate and the plant and animal life.

• WInter-Spring Quarters 3 & 4 - Reflect on last year's garden and make plans for the coming season. What worked and what might be changed? Deeper research into the history and changes of the land, the plants, animals and people from the last ice age until now. What is permaculture, and how can understanding what plants are native to our area and climate help us decide what to grow and plant? How do the choices we make affect the climate we will be living in? Can we design a garden that will let us study genetics? Order, start and plant the seeds and seedlings for the 2022-23 garden. Plant and tend the garden until the summer team of students and teachers are ready to take over.

Prerequisite: None

POP-UP QUARTERLY ELECTIVES (Honors option available)

What is a Pop-up Quarter-Credit Class? What makes it different from other classes?

A Pop-up Quarter-Elective class is a half-semester class, running during either the first or second half of a semester. It is designed to allow students the time to dive deeply into a particular subject with classmates in a way that is different from a typical subject-based class. Classes will typically consist of 1 "expedition" a week into the field, or workspace, and then students will use the rest of the scheduled time to work independently on their product with input and guidance from the teacher. Grading is primarily formative, with several assessed check-ins and a final project assessed for a final quarter grade. Student input into the assessment criteria and the assessment itself is expected. The main requirements for entering a class are curiosity and the ability and/or desire to work independently. Since this is the first year of operation, student participation is highly valued and will help shape the future classes in important ways. Students who sign up for a Quarter Credit Pop-up Course will be assigned a study for the quarter when the class does not run. Students may also take 2, quarter-credit classes in a semester when the timing works out. Most Pop-up Quarterly Electives will have an honors option.

Pop up American Sign Language for Beginners - S2, Q4

Course#: P0350 Grade: 9-12 Credits: ¼ per term

American Sign Language (ASL) for Beginners introduces students to the language and culture of Deaf persons in the United States. Students will explore basic/novice vocabulary, structure, syntax and grammar. Students will gain fluency with fingerspelling, greetings, numbers, colors, weather, question words, personal and possessive pronouns, and other high frequency terms/expressions, such as discussing family and daily routines. Students will also learn conversational/cultural behaviors of native ASL users, such as facial grammar and humor to hold a beginning-level conversation in ASL. Students will participate extensively in interactive classroom activities.

Prerequisites: None; talk to the teacher if possible.

Pop-up CubeSats - S2, Q4 - Mr. Kraljic and Mr. Njaa

(Honors option available)

Course #: P0255Grades: 9-12Credit: ¼ per termHonors Course #: P0256Grades: 9-12Credit: ¼ per term

For the past 3 years Falmouth HS has had a CubeSat team. The team has proposed and designed a Scientific Mission that has been selected to fly on Maine's first NASA CubeSat, MESAT-1. It is currently scheduled to launch in April 2022, and we will begin to actually receive and download the data shortly afterwards. Students in this class will learn about remote sensing, monitoring the environment from space, and how to read the data we have collected. They will then begin to analyze the data and present their findings to peers and to our mission partners, the University of Maine, the University of Southern Maine, and NASA. Research results can also be used to enter national and state science competitions where they may earn significant scholarships, recognition and research credibility that can be used for college. Class is appropriate for current CubeSat team members, and for any students with an interest in space exploration. By then, we may have other rocket and cubesat projects by Q4 that can also be worked on, based on work with USM, bluShift Aerospace, and UMO.

Prerequisite: None; talk to instructors if at all possible.

Pop-up Forest Ecology - S1, Q1 - Ms. Nye

(Honors option available)

Course #: P0251 **Grades:** 9-12 **Credit:** ¼ per term **Honors Course #:** P0252 **Grades:** 9-12 **Credit:** ¼ per term

Forest ecology is the study of forested ecosystems, including their living (plants, animals, fungi) and nonliving (soil, water) parts. In this quarter-long course, students will: learn to ID forest species and sample our local forest biodiversity, estimate forest carbon pools, take and process tree cores to determine the age of trees, use a clinometer to calculate tree height, and attempt to reconstruct the history of our stand. If time allows, water quality and soil health will be assessed. Students should expect to spend most of class time outdoors!

Prerequisite: None

Pop-up Maple Sugar Science & Sugaring S2, Q3

(Honors option available)

Course #: P0259Grades: 9-12Credit: ¼ per termHonors Course #: P0260Grades: 9-12Credit: ¼ per term

Starting in February students will identify and characterize and measure maple trees on campus that are suitable for tapping and boiling the sap for maple syrup. Each tree's location will be mapped on Google Earth and statistics for that tree recorded. When the sap starts to flow, we will gather and measure sap regularly, and periodically boil the sap down to make maple syrup. Each year data will be recorded and saved, so over time a record of climate impact may be monitored

Prerequisite: None

Pop-up Observational Astronomy - SLOOH - S1, Q1 or Q2

(Honors option available)

Course #: P0257 Grades: 9-12 Credit: ¼ per term Honors Course #: P0258 Grades: 9-12 Credit: ¼ per term

This class will involve collaboration with the University of Maine. The **Universe Explorers of Maine** online astronomy club will offer its members the ability to explore space from home using <u>SLOOH</u>. Class members will have opportunities to take astronomical images, share observations, go on exploration quests, and participate in online star

parties with experts in the astronomy field. You will take your own images of the Moon, planets, comets, and numerous deep sky objects like galaxies and nebulas. You will also share your observations with others from around the world, and have the opportunity to contribute to citizen science discoveries in astronomy. Students who are in the class will complete 2-3 online learning quests of their choice which will teach them how to use the remote telescopes through their computer. They will gather images and answer research questions within the quests. 7 different research telescopes in the Canary Islands and Chile will be available for students to use. They will then request and download their own images and use them to either carry out original research, or create art through astrophotography.

Prerequisite: None

Pop-up Science Fair Preparation - S2, Q3 - Mr. Kraljic and Mr. Njaa

(Honors option available)

Course #: P0253 Grades: 9-12 Credit: ¼ per term
Honors Course #: P0254 Grades: 9-12 Credit: ¼ per term

Did you know that your Maine State Science Fair project can earn you a full scholarship to U Maine Orono or USM? That projects that have won the Science Fair have gone on to National Competitions run by Intel and Regeneron, and won over \$100,000 in prizes? That every year more prizes and scholarships are added to the list? That you have the ability and capacity to do the same thing? This course is for students at every level, from beginners to people with a project already to go, and for anyone seeking the STEM Endorsement who wants support and help to organize and put their project together for the Fair in April. Students will move through the process of identifying a research question or technical design challenge, designing and carrying out a research project and entering the Maine State Science Fair. This course may be taken multiple times, since some projects may grow and improve from year to year.

Grades 9-12, no prerequisites. Students may bring a project they are already working on and focus on getting it ready to present, or start a new one that will be ready for the Science Fair in March. Students can also talk to any science teacher with an idea of their own. Classes will meet on Fridays from 12:00-1:00 and work independently with regular check-ins to maintain momentum towards a quality entry into this year's Maine State Science Fair on March 26th.

Prerequisite: None

ATHLETIC ADMINISTRATION

Course #: 9040 Grades: 11-12 Credit: ½ (fall 2021)

A study of those procedures necessary for the effective organization and administration of an athletic department. Included will be a discussion of budget, management styles, eligibility, scheduling, purchasing and inventory, legal liability and office management.

Prerequisite: None

PORTLAND ARTS & TECHNOLOGY HIGH SCHOOL (PATHS)

Portland Arts and Technology High School (PATHS) courses are open to all students in grades 9-12. PATHS courses are designed both for career bound and college bound students who are serious about gaining new skills and knowledge through applied learning. Classroom instruction, extensive labs, and community-based internships combine to give students real life experience in career directions. PATHS classes are an extension of the high school schedule,

counting towards graduation as any other elective class. Students who would like to visit PATHS classes should see their guidance counselor for more information. Parents who are interested in visiting PATHS should telephone the PATHS Guidance Department at 874-8166 to schedule a visit or inquire about Open House dates.

VOCATIONAL-TECHNICAL PROGRAMS AT PATHS - Year

3 credits

VOCATIONAL-TECHNICAL PROGRAMS AT PATHS - Semester

1.5 credits

Participation in PATHS courses requires a commitment of four periods every day. Interested students are encouraged to meet with their guidance counselor to discuss a proposed course schedule that would include participation in a PATHS program.

PATHS COURSE DESCRIPTIONS: For further information visit the PATHS website.

TECHNOLOGY & BUSINESS

ACCOUNTING I

Course#: 622 **Grade**: 10-12 **Credits**: 1

This first-year accounting class will give you a thorough background in the basic accounting procedures used to operate a business. The accounting procedures presented will also serve as a sound background preparation for studying business courses in college and for employment in the working world. Learn the principles of financial management and how they are applicable to all aspects of life -- both professional and personal. Emphasis is on the importance of analyzing and preparing financial statements, banking and checking account activities. Projects using the computer and simulation activities will be completed.

Prerequisites: None

ACCOUNTING II

Course#: 623 Grade: 11-12 Credits: 1

This advanced-course accounting class expands on topics learned in the first-year course while adding new topics with an emphasis on corporate accounting. The study of a second year of accounting helps qualify students for jobs and careers at higher levels than one year of study would allow. It is also an excellent background and preparation for college business and accounting courses and business majors. Most of our projects and simulations will be on the computer.

Prerequisites: Accounting I

ATHLETIC ADMINISTRATION

Course #:9040 **Grades:** 11-12 **Credit:** ½ (fall 2021)

A study of those procedures necessary for the effective organization and administration of an athletic department. Included will be a discussion of budget, management styles, eligibility, scheduling, purchasing and inventory, legal liability and office management.

Prerequisite: None

INTRODUCTION TO ADOBE CREATIVE SUITE

Course#: 6651 **Grade**: 9-12 **Credits**:½

PhotoShop: industry standard in photo editing and manipulation

Illustrator: a vector graphics editor **InDesign:** desktop publishing software

Flash: used to create vector graphics and animation for advertisements and the web

In this practical course you will gain software skills that are required by the design industry and become familiar with how Adobe Creative Suite can be used in context. This course is suitable for beginners with limited experience who wish to build their software knowledge within a creative context.

Prerequisites: None

Prerequisites: None

COMPUTER SCIENCE PRINCIPLES I (Honors option available)

Please note: There is an Honors option available when taking this course.

Course#: 6812 Grades: 9-12 Credits: ½ Honors Course#: 6814 Grades: 9-12 Credits: ½

Whether it's 3-D animation, engineering, music, app development, medicine, visual design, robotics, or political analysis, computer science is the engine that powers the technology, productivity, and innovation that drive the world. Computer science experience has become an imperative for today's students and the workforce of tomorrow in virtually all fields.

Computer Science Principles I (CSP I) introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. Topics covered include digital information, the internet, and web app programming. Assignments primarily consist of short readings, 1-2 page position papers on computer science topics, and programming projects.

CSP I covers the first half of the College Board AP Computer Science Principles curriculum. **However it is intended as the starting point for all grade levels and students with little or no previous knowledge of computer science.** Success in this course is most dependent on student engagement and timely work completion.

CSP I and AP CSP together cover the College Board Advanced Placement Computer Science Principles curriculum. Students who complete both courses would qualify to take the AP CSP Exam in the spring.

Prerequisites: Successful completion of Algebra I is recommended.

AP COMPUTER SCIENCE PRINCIPLES

Course#: 6813 **Grades**: 9-12 **Credits**: 1/2

NOTE: CSP I MUST be taken before this course.

Although taught as a separate class for logistical reasons, this course is the continuation of CSP I and collectively these two courses cover the College Board Advanced Placement Computer Science Principles curriculum qualifying students who complete both courses to take the AP CSP Exam in the spring.

AP CSP picks up where CSP I leaves off and extends the study of programming into more advanced techniques. In addition, big data and cyber security/global impacts are also covered. Finally class time is also devoted to preparing for the AP® Performance Task that is submitted to the College Board.

AP examinations are administered in May.

Prerequisites: Computer Science Principles I

COMPUTER PROGRAMMING III (HONORS option is available)

Please note: There is an Honors option available when taking this course.

 Course#: 6811
 Grades: 10-12
 Credits: ½

 Honors Course#: 68114
 Grades: 10-12
 Credits: ½

This course is a followup to Introduction to Computer Programming II and explores graphical user interfaces in Java and the Swing package. It is intended for students who, after completing the previous courses, would like to continue their study of programming and create more sophisticated programs.

Prerequisites: Either Intro to Computer Programming I and II or AP Computer Science A.

AP COMPUTER SCIENCE A

Course#: 6815 Grades: 9-12 Credits: 1

AP Computer Science A is an intensive, focused study of computer programming and is equivalent to a first-semester, college-level course in computer science. The course emphasizes object-oriented programming and design using the Java programming language.

Fundamental topics in this course include data types, sequence, selection, and iteration, classes, data structures, inheritance, and recursion. Skills practiced include: the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems.

At Falmouth High School, this course is intended for students who have previously completed Computer Science Principles I or who can demonstrate significant prior experience/ability for computer programming. Please contact Mr. Porter (jporter@falmouthschools.org) if you would like to take this course without taking CSP.

Prerequisites: Successful completion of Computer Science Principles I or permission from the instructor.

COMPUTER REPAIR

Course #: 684 **Grade:** 10-12 **Credits:** 1/2

The course will follow Apple's Technical Learning Program to prepare students for the Apple's Technician Certification Exam. Students will learn the fundamentals of customer service and develop an understanding of how to diagnose hardware and software issues common to apple products. Students will also experience hands-on repair on a variety

of laptops and desktops. Students will be able to apply good workplace habits, customer service and diagnostic skills to other platforms other than Apple after the completion of this course.

Prerequisites: A semester of Tech Team is recommended.

TECHNOLOGY TEAM I

Course#: 683 **Grade**: 9-12 **Credits**: 1/2

Participating students will provide technological support to both staff and students. Students will also be expected to create an independent study of their choosing to be approved by the course advisors. Students are expected to report to the technology office in the library during one study hall per day and also to meet once a month as a group. Students can earn credit or community service hours. Interested students should apply at http://bit.ly/XUmiQa.

Prerequisites: By application and interview.

GRAPHIC DESIGN I: Introduction to Art Principles and Technology

Course#: 804 **Grades**: 9 -12 **Credits**: 1/2

We will combine art and technology to learn the basic principles, elements and properties of design, while gaining an introduction to the Adobe Suite: Photoshop, Illustrator and InDesign. The course will consist of, but not limited to, lectures and demonstrations, visual exercises, and projects such as, cd covers, logos, letterhead, business cards, brochures, posters. Upon successful completion of this course, you may take Graphic Design II to advance your skills to complete projects such as magazines, package design, web design, and other self-directed projects. You may also move on to take additional art courses, such as Ceramics Wheel Throwing, Ceramics Handbuilding, Printmaking, Visual Communications and Sculpture. For students interested in taking Drawing and Painting, Graphic Design I does not count as a prerequisite -- you must take Foundations of Art.

Prerequisites: None

GRAPHIC DESIGN II

Course#: 8041 **Grades**: 9 -12 **Credits**: 1/2

In this advanced design course we will exercise the knowledge of the principles, elements and properties of design to create sophisticated design projects with the Adobe Suite: Photoshop, Illustrator and InDesign. The course will consist of, but not limited to, lectures and demonstrations, visual exercises, and projects such as, magazine layout, package design, web design, and other self-directed projects.

Prerequisites: Graphic Design I

ENTREPRENEURSHIP

Course#: 662 **Grades**: 11-12 **Credits**: 1/2

"Turning your passion into your job is easier than finding a job that matches your passion." (Seth Godin)

This course will help students turn their passions into a successful business venture. Students will partner with mentors from the Greater Portland community to gain the entrepreneurial skills needed to develop a plan for a new business based on their personal interests. Students will generate real-world solutions based on the problems they find through market research in the community. Students will answer questions such as "What is my prospective market?" or "What product features match customer needs?" or "How do I create demand?".

The course will use the Lean Startup method as a framework, but students will also gather data in the Falmouth community and use this data to generate solutions to the problems they discover. The course will culminate in a "Shark Tank" like presentation of student-generated solutions to the community's demands. The problem-solving and leadership skills gained in this course will serve students beyond the walls of FHS.

Prerequisites: Creativity, curiosity and a willingness to take risks.

MAKING STUDENT FILM

Course #: 669

Grades: 9-12

Credits: ½

This film making workshop expects students to be producing film during and after class. Class time will be spent doing one period film challenges and working on all aspects of filming. Students will be expected to participate and learn a variety of film making skills including acting, writing, filming, editing, producing, and more. Successful students will show their learning by producing their own short film they will submit to the Anchor Film Festival. Students will be expected to work closely with students enrolled in Creative Writing Screenwriting. (Students can enroll in both classes.)

VIRTUAL HIGH SCHOOL



Falmouth High School students may take any VHS course that is not offered at Falmouth High School. If a student cannot schedule a Falmouth High School course, working through the guidance office, a student may take the Virtual High School offering of that course. Virtual High School courses generally require 5 to 7 hours of work per week. Students are expected to log in at least 3 times per week, and assignments and online discussion are due on a weekly basis. Students will also be expected to meet with the Falmouth High School Site Coordinator on a regular basis. Because the ability to work independently, manage time well, and read and write effectively are essential to success in an online course, students will be asked to provide one teacher recommendation, guidance recommendation and complete a short online survey.

VIRTUAL HIGH SCHOOL

Course#: VH001 Grade: 9-12 Credits: see below Details

Virtual High School offers over 200 full semester courses in the arts, business, English language arts, world languages, life skills, math, science, social studies, and technology. In addition, VHS offers 15 Advanced Placement (AP)* full year courses and 11 Pre-Advanced Placement courses to participating students. All of the core courses are NCAA

accredited. The course catalog, as well as lots of information about Virtual High School is available at http://www.govhs.org/Pages/Academics-Catalog. Virtual High School courses are listed on the transcript by their course name - for example, "AP Physics".

Students must obtain a packet from guidance with instructions for registering for the specific online course.

The course title and grade is posted on the transcript.

Full Year - 1 Credit **Semester** - 1/2 Credit

Prerequisites: See VHS course descriptions