# Course of Studies 2023-2024



# **Brewer High School**

#### BREWER SCHOOL DEPARTMENT MISSION, VISION AND CORE VALUES

#### Mission

Brewer School Department educates all students through relevant and engaging instruction to achieve personal success and contribute to their community.

#### Vision

Brewer School Department will be an innovative learning community preparing students to reach their full potential as leaders, learners and critical thinkers in a complex and changing world.

#### **Core Values**

- 1. We agree to make decisions in the best interest of students.
- 2. We agree to promote positive relationships with all stakeholders, through transparent communication.
- 3. We agree to prepare students for entrepreneurial thinking, college, military and workforce readiness.
- 4. We agree to respect our community through cultural and instructional responsiveness and communicative practices.
- 5. We agree to develop personalized learning pathways for students through collaboration, student ownership, and goal setting.
- 6. We agree that we will enhance our craft through personal and professional development, collaboration, and continuous improvement.
- 7. We agree to use cutting edge technology to enhance highly engaged teaching and learning.

First Reading: July 11, 2016 Second Reading: August 1, 2016 Adopted: August, 1, 2016 January 2023

Dear Students and Parents/Guardians:

Preparing students for personal success is critically important to our mission at Brewer High School. With that in mind, we are continually looking for ways to engage students in learning. Once again, we are pleased to provide numerous opportunities for students through our course offerings for next year.

This Course of Studies is meant to provide students and parents/guardians with an overview of the courses that are available at Brewer High School. Students and parents/guardians should carefully look through the guide and talk with guidance counselors and teachers before choosing classes for next year. Students should consider those classes that will not only provide the skills and knowledge needed for after high school, but also challenge them and help them grow while they're here.

As a school, we continue to revise and improve our course offerings, looking for ways to make learning more meaningful, enjoyable, and beneficial for our students. It is our goal to have every student graduate from Brewer High School with the skills and knowledge he/she needs to achieve personal success and contribute to his/her community. And, of course, Brewer High School faculty, staff, and administration are committed to providing a safe, respectful and positive learning environment for all.

I look forward to working with you during the 2023-2024 school year and want to extend a special welcome to the class of 2027.

Sincerely,

Brent Slowikowski Principal

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### **Graduation Requirements and Pathways**

#### The diploma requirements are as follows:

- English: Four (4) credits
- Mathematics: Three (3) credits
- Science: Three credits (3)
- Social Studies: Three (3) credits (including one (1) year of U.S. History)
- Fine Arts: One (1) credit
- Health: One half (1/2) credit
- Physical Education: One (1) credit
- Career and Education Development: One half (1/2) credit
- Electives: The remaining 6 credits may be selected by the student on the basis of his or her interests, abilities and plans following graduation (electives)
- Students pursuing a post-secondary college/university experience are highly recommended to take two (2) credits of World Language and a fourth year of Mathematics and/or Science.

**TOTAL REQUIRED CREDITS: 22** 

#### **Recommended Pathway for College and Career Readiness**

Colleges recommend the following program (as a minimum) for students preparing for a four-year college program:

- 4 years English
- 1-year Biology with Lab
- 1-year Chemistry or Physics
- 1-year Geometry
- 2 years Algebra (Algebra I & 2) many programs also require Trigonometry
- 2 years of the same foreign language
- 3 years of Social Studies to include U.S. History

#### **Honors Diploma Pathway**

The Honors Diploma Program requirements are rigorous and based on research and college readiness standards. In order to be accepted into Honors Classes students must meet the requirements in the Honors Courses Rubric found below:

In order to receive an Honors Diploma students must meet the following requirements:

English 4 credit minimumMath 4 credit minimum

• Modern Language 3 credit minimum of the same language

• Science 3 credit minimum

• Social Studies 3 credit minimum Additional Requirements:

- Minimum of 10 AP/Honors courses
- All standard course requirements
- 6 HDP sponsored Seminars and 2 HDP sponsored field trips
- Senior Seminar or Senior Exhibition Project
- Cumulative GPA of 90 or higher (by end of 7th semester)

#### **Advanced Placement Pathway**

Advanced Placement (A.P.) is a program sponsored by the Educational Testing Service, a subsidiary of the College Board in Princeton, N.J. The program consists of 37 college-level courses across 22 subjects. Follow this link for more information

https://apstudent.collegeboard.org/creditandplacement/credit-policy-detail?diCode=5183

All Advanced Placement courses are supplemented by a nationwide AP exam given annually in May. Most colleges grant credit and/or advanced placement (sophomore standing) to students whose AP examination grades are considered acceptable. Courses are listed in the following sections and other AP Courses may be offered online via AP4ME.

#### **Dual Enrollment / Concurrent Pathway**

Brewer High School offers dual enrollment for some courses. This means that students can earn college credit as well as high school credit for these courses. With successful completion of the course a student will receive a transcript from the college or university. Depending on the course that it is affiliated with, students can earn transferable credits from University of Maine System, Eastern Maine Community College, or Husson University. If enrolled in a dual course, students can elect not to receive college credit, as well.

#### **Technical / Community College Preparation**

Careful course selection is necessary to meet requirements for admission to a two year technical or community college. As a minimum, most of these programs require Algebra I. However, many of the programs require Algebra I & II and thorough preparation in the sciences or applied learning areas (vocational programs, business courses, etc.) Student Services can provide additional details in regards to these requirements.

\*Please see UTC's program guide for more information.

#### For incoming freshmen only:

#### Freshmen Honors Rubric

To take Freshmen Honors in Math and or Science, it is *strongly* recommended that a student earn a score of 243 or higher on the Math NWEA in the 8th grade year and one of the following:

- 93 or higher-grade average in 8th grade math/science class
- Math or Science Teacher Recommendation

To take Freshmen Honors in ELA, World Languages and/or Social Studies, it is *strongly* recommended that a student earn a score of 233 or higher on the Reading NWEA, 229 or higher for Language NWEA in the 8th grade year and one of the following:

- 93 or higher-grade average in 8th grade content class
- Content Area Teacher Recommendation

To take Freshmen Honors in Visual Performing Arts (Music or Art), a student needs to provide the following information for review:

- A teacher recommendation in Music or Art.
- For Art, sample artwork will need to be submitted for high school teacher to review.
- For Music, a student will need to audition for the instructor.

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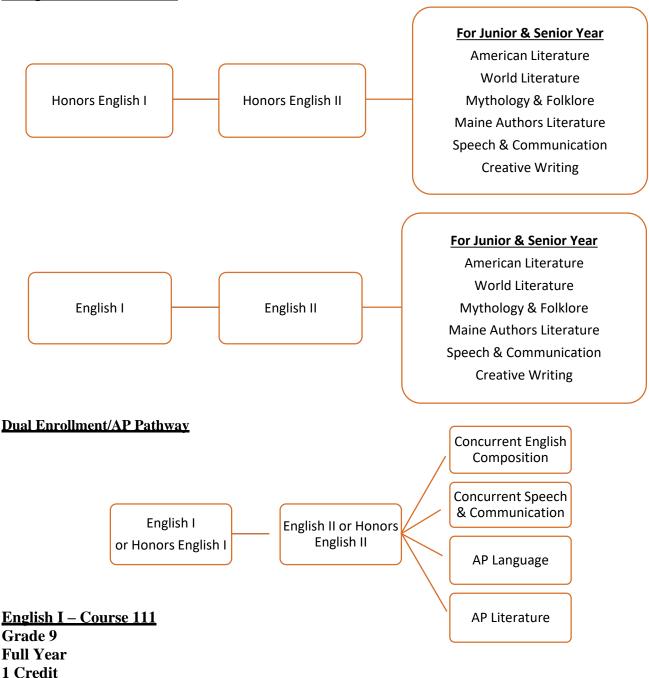
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#### **ELA**

English Language Arts suggested pathways:

#### College & Career Readiness



English I is a comprehensive course of literature, composition, and language. Students will explore fiction and nonfiction texts, focusing on story elements, point of view, and purpose. Writing will be structured around narrative and informative pieces. Analysis of speech will enable students to identify figurative language techniques authors use to develop their purpose and message. Students will continue to study the conventions of English grammar and punctuation. Vocabulary development will come from words generated from reading selections.

Prerequisite: None

#### Honors English I – Course 110

Grade 9 Full Year 1 Credit

**Prerequisite:** Meets the requirement in the Freshmen Honors Rubric

Honors English 1 is designed to prepare students for more rigorous English courses taken during their junior and senior years. The emphasis in Honors English I is on the development of strong reading, writing, speaking, and critical thinking skills. Students will read and analyze a broad and challenging range of fiction and nonfiction texts, focusing on story elements, point of view, and purpose. Additionally, students will read several works of fiction independently during the course of the year and deliver presentations on these books, connecting their independent reading to our learning targets. They will also strengthen and develop their writing skills with the study of narrative and informative writing. Students will continue to study the conventions of English grammar and punctuation. Vocabulary development will come from words generated from reading selections.

#### **English II – Course 121**

Grade 10 Full Year 1 Credit

Prerequisite: English I

Sophomore English continues to build and reinforce skills needed to prepare students for a post-secondary education. Sophomores will continue to work with paragraph development and literary analysis. The emphasis of literary study includes the genres of poetry, the short story, and the novel. Sophomores will continue the study of grammar by focusing on mechanics, usage, and structure. Vocabulary enrichment activities are taught through the use of words taken from literary study and vocabulary programs.

#### Honors English II – Course 120

Grade 10 Full Year 1 Credit

Prerequisite: Teacher Recommendation, or grade of 90 or higher in English I, or Honors English I

Sophomores who select Honors English II accept the challenge of an intense, fast-paced course that meets the expectations of English II and moves beyond them. They will focus on more difficult literature and on critical analysis and argumentation. They will also investigate sophisticated rhetorical strategies and the language of the English AP curriculum, and concurrent English 101 preparing them for more rigorous classes and pathways in the 11th and 12th grade year. Students in this rigorous course will also supplement their learning with independent reading and writing assignments. Students will continue to study the conventions of English grammar and punctuation.

#### AP English Language and Composition – Course 130

Grade 11, 12 Full Year 1 Credit

Prerequisite: Teacher Recommendation or Honors English II strongly recommended

An Advanced Placement course for juniors or seniors in English Language and Composition trains students to become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts (nonfiction texts). The course also gives students the practice and helpful criticism necessary to make them flexible writers who can compose in a variety of modes and for a variety of purposes, with an emphasis on expository, analytical, argumentative, and synthesis writing. Assuming that its participants have already mastered standard English grammar, the course seeks to develop stylistic maturity through students' mastery of their own writing processes, particularly their ability to reconsider and revise their work. The springboard for students' writing efforts is primarily investigation of expository essays and American literature. Other requirements of the course include journal work, cooperative presentations, and summer reading and writing.

#### <u>American Literature - Course 132</u>

Grade 11, 12 Semester .5 Credit

Prerequisite: none

This semester course will focus on American literary works. Emphasis is placed on historical background, cultural context, and literary analysis of selected fiction, non-fiction, poetry, and drama. Upon completion, students should be able to interpret, analyze, and become proficient in responding to selected works using a variety of discussion, reading, writing, and grammatical skills.

#### **Maine Authors Literature – Course 182**

Grade 11, 12 Semester .5 Credit

Prerequisite: None

This semester course introduces students to a variety of literary works written by Maine authors. Emphasis is placed on poetry, non-fiction, and selected fiction. This course engages students by inviting them to think deeply about the Maine experience and what that means for them. Upon completion, students should be able to interpret, analyze, and become proficient in responding to selected works using a variety of discussion, reading, writing, and grammatical skills.

#### World Literature - Course 134

Grades 11, 12 Semester .5 Credit

Prerequisite: none

This one semester course engages students in a variety of literary works from around the world. Emphasis is placed on historical background, cultural context, and literary analysis of selected fiction, non-fiction, poetry, and drama. Upon completion, students should be able to interpret, analyze, and become proficient in responding to selected works using a variety of discussion, reading, writing, and grammatical skills.

#### **AP English Literature and Composition – Course 140**

Grade 11, 12 Full Year 1 Credit

Prerequisite: Teacher Recommendation or Honors English II strongly recommended

AP English Literature and Composition is designed to be a college level survey course with the intellectual challenges and workload consistent with an undergraduate literature and writing course. Most of the literature in this class is arranged chronologically with British literature as its focus; however, works from other cultures are studied as well to broaden the students' knowledge of literature and culture of other countries. Students in this class will be required to write a formal essay at the end of each unit and either a timed writing or an essay test as well. Shorter, on-demand writing will be assigned daily. Students will be required to understand the function of works within respective literary time periods while gaining a greater understanding of how canonical texts preserve cultural, societal, and political ideology.

#### **Speech and Communication – Course 141**

Grades 11, 12 Semester .5 Credit

Prerequisite: None

Students will study and practice the fundamentals of interpersonal communication, discussion speaking, and public speaking. By the end of this course, students will be more equipped to communicate their ideas with others in the classroom, in the workplace, and in more formal speaking settings. Students will be expected to analyze the speeches of others; research, organize, and write their own presentations; and give presentations in a variety of settings. They will explore several digital media to employ in their own presentations.

#### **Concurrent Speech and Communication – Course 144**

Grade 11, 12
Full Year
1 Credit

Prerequisite: English II or Honors English II, maintained a C- or high in English II

Concurrent Speech and Communication is a yearlong, dual enrollment course that will offer students the opportunity to receive both high school and college credit. Upon completion of the course, students who earn a grade of C or higher will receive 3 college credits for Speech and Communication through the University of Maine system. Students choosing to take this course will need to be prepared for a rigorous workload. The course emphasizes experiential learning. Topics include audience identification, topic development, purpose recognition, organization and delivery, use of props/visuals/technology, overcoming public speaking fears, and the importance of non-verbal communication and signals.

#### **Concurrent English Composition – Course 148**

Grade 11, 12 Full Year 1 Credit

Prerequisite: English II or Honors English II, maintained a C- or higher in English II

Concurrent English Composition is a yearlong, dual enrollment course that will offer students the opportunity to receive both high school and college credit. Upon completion of the course, students who earn a grade of C or higher will receive 3 college credits for English Composition through the University of Maine at Augusta. Students choosing to take this course will need to be prepared for a rigorous workload that will require them to engage in college level writing and reading. Upon completion of this course, students will have completed a portfolio that includes argumentative, critique, analytical, synthesis, narrative, digital, and research writing. This course will encourage students to engage in the writing workshop model, which is designed to help students improve writing skills that they will need for a variety of academic courses and purposes.

#### **Creative Writing – Course 160**

Grades 11, 12 Semester .5 Credit

Prerequisite: None

Creative Writing offers students a chance to explore the writing process in both teacher-directed and self-directed settings. The class will focus on the elements of fiction, memoir, writing for children, and digital writing. In addition to whole-class assignments, students will be given ample workshop time to develop their own writing with the help and feedback of peers and the teacher. Self-direction and participation in class discussion are essential.

#### Mythology & Folklore - Course 180

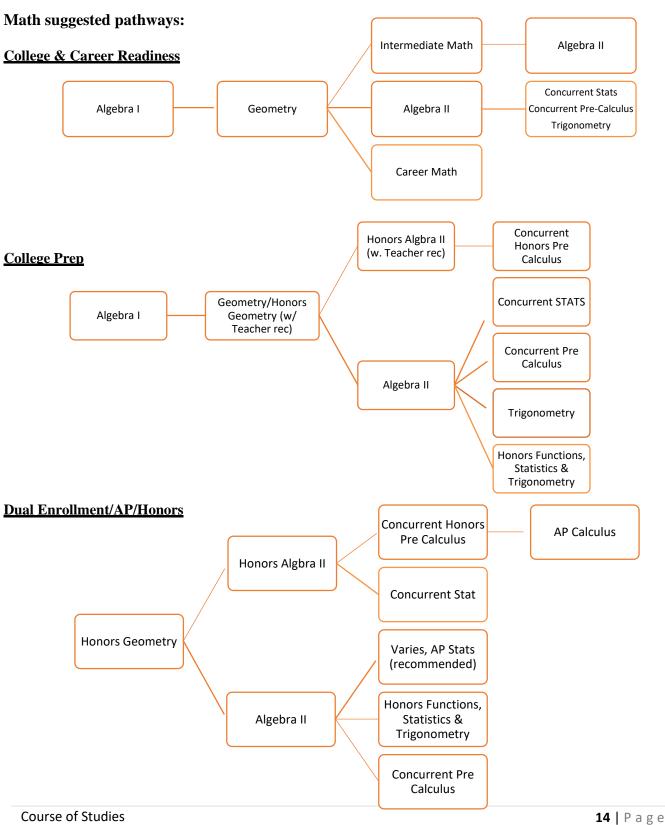
Grade 11, 12 Semester .5 Credit

Prerequisite: None

For as long as people have been able to communicate, they have told stories. Storytelling serves several purposes: stories can bond people and communities through a common creation belief; stories can warn us of consequences and keep us from harm; stories can tell us how to behave within a group to gain acceptance; and stories can entertain us. In this course, we will begin by studying the traditional mythology and folklore of several countries through a variety of media and end with the urban legend. In this semester course, we will read ancient texts, listen to podcasts, and watch interpretations of old favorites and either write our own or adapt our favorites.

#### **Mathematics**

Due to the fact that math skills build on previous learning, appropriate placement is vital to success. Students will be required to meet all prerequisites and should select math courses that are challenging and will prepare them for their future education and careers. It is important to check math prerequisites for postsecondary programs. Here is a flow chart of suggested courses to take that best fits your pathway for success after graduating from Brewer High School.



**Brewer School Department** 

Algebra I - Course 412

Grade 9
Full Year
1 Credit

Prerequisite: None

Algebra I is the first in a series of math courses in the college and a career readiness program. This course develops the basic concepts and establishes the mathematical symbolism of algebra that is needed as a foundation for later courses. The topics of number relations, formulas, positive and negative numbers and the fundamental arithmetic operations make it an extension of earlier mathematical learnings. Open sentences and their symbols, variables, and functions begin the fundamental theory and structure of algebra. This class may not be taken concurrently with Geometry.

#### Algebra I Part 1- Course 411F

Grade 9
Full Year
1 Credit

Prerequisite: Teacher Recommendation, NWEA score of 220 or below

Algebra I Part 1 is the first in a series of math courses in the college and a career readiness program. This course develops the basic concepts and establishes the mathematical symbolism of algebra that is needed as a foundation for later courses. The topics of number relations, formulas, positive and negative numbers and the fundamental arithmetic operations make it an extension of earlier mathematical learnings. Open sentences and their symbols, variables, and functions begin the fundamental theory and structure of algebra. This class may not be taken concurrently with Geometry.

#### Algebra I Part 2- Course 476

Grade 10 Full Year 1 Credit

**Prerequisite:** Successful completion of Algebra I Part 1, Teacher Recommendation

Algebra I Part 2 is the second in a series of math courses in the college and a career readiness program. This course continues developing the knowledge of characteristics of linear functions and equations. The new topics of solving systems and techniques of the factoring to find characteristics of functions are introduced and explored at length. This class may not be taken concurrently with Geometry.

#### **Geometry - Course 422**

Grade 10 Full Year 1 Credit

Prerequisite: Algebra I

Geometry is the second in a series of math courses in the college and a career readiness program. This course provides students with experiences that deepen the understanding of two and three-dimensional objects and their properties. Topics include points, lines, angles and planes, polygons, (with a special focus on quadrilaterals, triangles, right triangles) circles, and polyhedral and other solids. An understanding of proof and logic is developed. This class cannot be taken concurrently with Algebra I.

#### **Honors Geometry - Course 420F**

Grade 9
Full Year
1 Credit

Prerequisite: Algebra and meets the requirement in the Freshmen Honors Rubric

This course is for freshmen seeking to take the Honors Pathway. Please see course description for Honors Geometry below.

#### **Honors Geometry - Course 420**

Grade 10 Full Year 1 Credit

**Prerequisite:** Teacher Recommendation

Honors Geometry is the most demanding geometry course for the college preparatory student. This course requires a high degree of understanding of algebraic theory in addition to superior computational skills; and therefore, should be undertaken only after successful completion of a rigorous course in Algebra I. Students will work on the development of deductive theory and the application of theory to problem solving. They will prove theorems essential to the study of plane geometry and selected topics in coordinate geometry. This course is designed to be highly conceptual in nature with a maximum emphasis on geometry proof. This course is recommended for students who plan on a 4-year college education with emphasis in the math and science area.

#### Career Math - Course 444

Grade 11, 12 Full Year 1 Credit

**Prerequisite:** Credit earned in Algebra I & Geometry, with scores not higher than an 80

Students will master basic skills and extend their knowledge as they prepare for the workplace. Throughout the course, students hone their computational skills and extend their knowledge through problem solving and real-world applications. The course also covers fractions, operations with fractions, decimals, percent's, ratios, problem solving, and basic concept review in geometry.

#### **Intermediate Math – Course 451**

Grade 11 Full Year 1 Credit

**Prerequisite:** Teacher Recommendation, credit earned in Algebra 1 and Geometry, with scores not higher than an 80

Course Description: This course is designed for students who need another year of preparation before taking Algebra II. It will provide students with further understanding of the applications of mathematics and the ability to communicate its use. Topics may include operations and expressions, linear equations and inequalities (graphing, solving, and systems), factoring and solving polynomials, solving quadratic equations, basic geometry, triangles, and right-triangle trigonometry. Although this is not a test preparation class, throughout this course some topics from the ASVAB, Accuplacer and SAT are reviewed and practiced.

Algebra II - Course 432

Grades 11, 12 Full Year 1 Credit

**Prerequisite:** Algebra I (80 or better) and Geometry

Algebra II is the third course in a series of math courses in the college and a career readiness program. Algebra II reviews and extends understanding and use of the number system of elementary algebra, formulas, equations, and graphs. Other topics include exponents, quadratics, polynomials, radicals, complex numbers, probability, and logarithms. The Algebra II course offers a solid foundation for those students planning to take a fourth year math course or for those who will study math further in post-secondary education.

#### **Honors Algebra II - Course 431**

Grade 10, 11 Full Year 1 Credit

**Prerequisite**: Teacher Recommendation, 85 or better in Honors Geometry; 93 or better in Geometry and in Algebra I

Algebra II reviews and extends understanding and use of the number system of elementary algebra, formulas, equations, and graphs. Other topics include exponents, radicals, quadratics, complex numbers, probability, and equations of higher degree. Honors Algebra II requires a substantial commitment in and outside of class. It is designed to prepare students for Concurrent Honors Pre-Calculus and AP Statistics.

#### Honors Functions, Statistics, and Trigonometry (Honors FST) - Course 455

Grade 11, 12 Full Year 1 Credit

Prerequisite: Teacher Recommendation, 85 or better in Honors Algebra II or 93 or better in Algebra II

Honors FST is recommended for the student who plans on a 4-year college education with an emphasis in the areas of math and science. This rigorous course integrates statistical, trigonometric and algebraic concepts. Students will display, describe, transform, and interpret numerical information represented as data, graphs, or equations. The use of polynomial, exponential, and trigonometric functions to model real-world situations is the major theme. It also includes several more advanced topics including parametric equations, binomial distributions, normal distributions, and an introduction to statistical inference.

#### **Concurrent Honors Pre-Calculus - Course 430**

Grade 11, 12 Full Year 1 Credit

**Prerequisite:** 85 or better in Honors Algebra II

Throughout the year, tasks require students to be independent thinkers and to have good study skills. Students will model functions graphically, numerically, and algebraically. Types of functions include polynomial, power, rational, exponential, logistic, logarithmic, and trigonometric. The course develops problem solving skills and conceptual understanding through class discussions and practice work involving mental math, pencil and paper work, and judicious use of programmable calculators. This course is specifically designed as a prerequisite for AP Calculus. Graphing calculators are needed. Recommendation: any version of the TI-83 or TI-84. \*This course requires a substantial commitment in and outside of class.

#### **Concurrent Pre-Calculus - Course 429**

Grade 11, 12 Full Year 1 Credit

**Prerequisite:** 85 or better in Algebra II

Pre-Calculus is a College Preparatory course for students who have successfully completed Algebra II. This course is recommended for students who expect to take calculus or similar advanced math classes at the college or university level. Students will study the theory of functions and graphs, including polynomial, rational, exponential, logarithmic, and trigonometric functions. Students will also study applications of trigonometry, trigonometric identities and equations.

#### **Trigonometry - Course 450**

Grade 11, 12 Full Year 1 Credit

Prerequisite: Algebra II

Trigonometry is a College Preparatory course for students who have successfully completed Algebra II. This course is recommended for students who expect to enter a post-secondary course of study that requires the study of trigonometry, especially in the fields of engineering and science. Students will review several Algebra II topics in the coordinate plane, graphing and transforming functions, and solving higher order equations. Students will study right triangle and circle trigonometry, graphs of trigonometric functions, trigonometric equations and identities, inverse trigonometric functions, and vectors. There will also be a focus on using technology to explore applications of triangle trigonometry, simple harmonic motion, and the path of a projectile using polar coordinates.

#### AP Calculus AB - Course 458

Grade 12 Full Year 1 Credit

**Prerequisite:** 88 or better in Honors Pre-Calculus

Students in this class must have completed a rigorous course of studies in math. AP Calculus is directly preceded by a Pre-calculus class in which the judicious use of programmable calculators is emphasized. Advanced Placement Calculus consists of a full academic year of study that is comparable to calculus courses in colleges and universities. Calculus is explored through the interpretation of graphs and tables as well as analytic methods such as multiple representatives of functions. To succeed in this class, students must be motivated learners with good study skills. It is expected that students who take this course will seek credit and/or college placement from institutes of higher learning (will take the AP Calculus exam). \*This course requires a substantial commitment in and outside of class. Possible summer work is required.

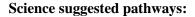
#### **Concurrent Statistics - Course 462**

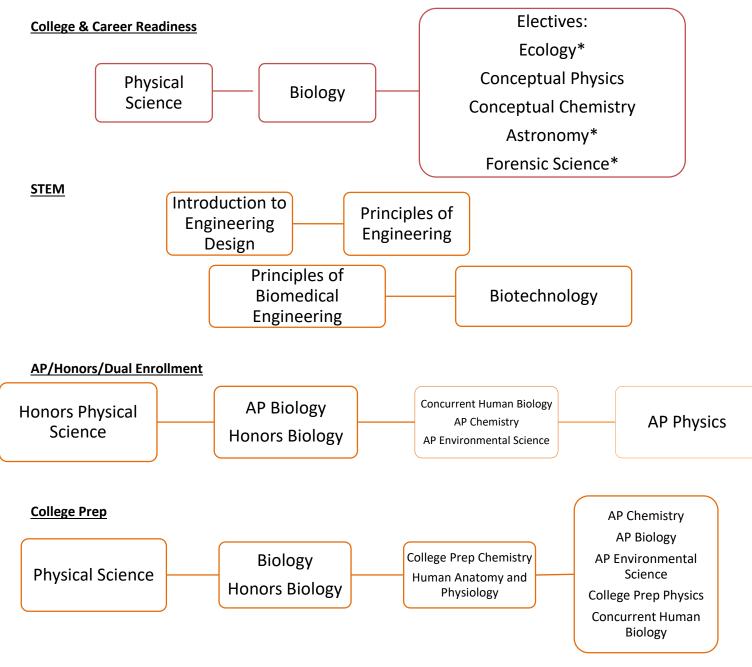
Grade 12 Full Year 1 Credit

**Prerequisites:** Teacher Recommendation, grade of 85 or better in Algebra II

In this course students will develop statistical literacy in the two major applications of statistics, namely descriptive and inferential statistics. Students will learn tools of collection, analysis, and interpretation of data. As much as possible, real data will be analyzed and technology will be utilized.

#### **Science**





#### **Physical Science - Course 511**

Grade 9
Full Year
1 Credit

Prerequisite: None

Physical Science focuses on two major areas of science: chemistry and physics. Students are exposed to hands-on activities, labs, and the process of science. This course covers a variety of learning targets, which may include: Heat Energy, Forces & Motion, and Matter.

#### **Honors Physical Science - Course 510**

Grade 9
Full Year
1 Credit

**Prerequisite:** Meets the requirement in the Freshmen Honors Rubric

Honors Physical Science will explore the same concepts as Physical Science course 511 in greater depth and at an accelerated pace than the Physical Science course 511. This is a math and technical writing intensive course.

#### **Biology - Course 522**

Grade 10 Full Year 1 Credit

Prerequisite: None

The primary goal of Biology is to develop a solid understanding of the processes of life. This course allows students to make scientifically informed decisions related to their health and to the health of the planet. Students in biology will study life through such topics as homeostasis, cell biology, genetics, ecology and evolution.

#### **Honors Biology - Course 521**

Grade 10 Full Year 1 Credit

**Prerequisite:** Teacher Recommendation

The primary goal of Honors Biology 521 is to help students develop the kinds of thinking and problem-solving skills that will enable them to understand the biological challenges of today and of the future. This course will allow students to demonstrate proficiency in all of the life science learning targets through study of the following major content strands: Biochemistry, Cell Biology, the Molecular Basis of Heredity, Evolution and Biodiversity, and the Interdependence of Organisms. Honors Biology 521 has a heavier emphasis on molecular biology and covers material at a faster pace and in greater depth than Biology 522. This course will be excellent preparation for Advanced Placement and College Prep/Honors Courses as well as science courses taken in college.

#### **Conceptual Chemistry - Course 534**

Grade 11, 12 Semester .5 Credit

Prerequisite: None

In Conceptual Chemistry, students will learn how everything around them can be traced to incredibly small particles called atoms. Chemistry is the study of how atoms combine to form materials. By learning chemistry, you gain a unique perspective on what things are made of and why they behave as they do. The major strands of Structure and Properties of Matter and Chemical Reactions will be presented in a way where students will demonstrate an understanding of concepts and then apply those concepts to real-life phenomena with little emphasis on calculations. This course is for students who want to be prepared for community college programs or who want to know more about the world around them. Not recommended for 4-year college path way.

#### **Advanced Placement Biology - Course 550**

Grade 10, 11, 12

Full Year

2 Credit

**Prerequisite:** Teacher Recommendation, must have 85 or higher in Physical Science or Honors Physical Science; 11th & 12th - B or higher in Biology and Chemistry (chemistry may be taken concurrently)

This course is intended to be equivalent to an introductory biology course found at the freshmen university level. Students will cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes—energy and communication, genetics, information transfer, ecology, and interactions. The purpose and goals of this course are to present an in depth, college level study of the biological sciences, help learners develop college level critical thinking skills and study habits, and prepare for the comprehensive AP Biology examination. Up to eight hours of college credit can be earned. This course may also be taken for four UMA credits.

#### Concurrent Human Biology 100 - Course 538

Grade 11, 12 Full Year 1 Credit

**Prerequisite:** Teacher Recommendation or an 85 or higher in a Biology course

Concurrent Human Biology is the study of the structure and function of the human body. The course is preparation for advanced biological studies, biomedical nursing and the other science based careers. Laboratory experience and text based activities provide students learning in the following topics: the major body systems: how the body systems work together to provide homeostasis; body functions in the health and diseased states: blood typing: muscle action: cranial nerve functioning: and bioethics. Through the successful completion and enrollment through UMA of Bio 100 you will earn four UMA college credits

#### **Advanced Placement Chemistry - Course 530**

Grade 11, 12 Full Year 2 Credits

**Prerequisite:** Teacher Recommendation, two years of science courses with grades of 85 or higher, and concurrent enrollment in Algebra II or higher.

AP Chemistry is designed to be the equivalent of the general chemistry course usually taken during the first college year. Emphasis is placed on the theoretical aspects of chemistry and the curriculum closely follows the list of topics in the AP Chemistry course description. The course will prepare students for the AP Chemistry exam administered in May by the College Board. Participating colleges will grant credit and/or advanced placement to students who have done well on the exam. Up to eight hours of college credit can be earned.

#### College Preparatory Chemistry - Course 531

Grade 11, 12 Full Year

1 Credit

**Prerequisite:** Teacher Recommendation or Two years of science courses with grades of 85 or higher and concurrent enrollment in Algebra II or higher.

Chemistry is the science that investigates the structure and properties of matter and its transformations. Topics covered create a foundation upon which students can build in future science courses. Laboratory investigations introduce fundamental topics and techniques designed to foster reasoning skills, creativity, and cooperative learning.

#### **Advanced Placement Environmental Science - Course 535**

Grades 11, 12 Full year 1 Credit

Prerequisite: Recommendation from current science teacher

AP Environmental Science is designed to be the equivalent of a one-semester, introductory college course in environmental science. The major topics of student includes energy conversions that underlie all ecological processes, the Earth as an interconnected system and human impact on natural systems. The course will prepare students for the AP Environmental Exam administered in May by the College Board. Participating colleges will grant credit and/or advanced placement to students who have done well on the exam. Up to four hours of college credit can be earned.

## Ecology - Course 536

Grades 10, 11, 12

Semester .5 Credit

Prerequisite: None

Ecology is the branch of science that deals primarily with how living things interact with both the biotic and abiotic parts of the environment. Students will study how ecosystems are organized and the roles that organisms have in those ecosystems. They will explore the delicate balances found within ecosystems regarding energy transfer and nutrient cycling. Students will compare the diversity of ecosystems on the planet, analyze how the abiotic factors of those ecosystems dictate the structure of biotic associations and how disturbances can have both local and global implications.

#### **Advanced Placement Physics I - Course 540**

Grade 12

Full Year

2 Credit

**Prerequisite:** Teacher Recommendation, two years of science courses with grades of 85 or higher and completion of Algebra II

AP Physics I is designed to be the equivalent of the general physics course for science majors usually taken during the first semester of the first college year. Emphasis is placed on the theoretical aspects of physics and the curriculum closely follows the list of topics in the AP Physics I course description. This course focuses on algebra-based physics problems. The course will prepare students for the AP Physics I exam administered in May by the College Board. Participating colleges will grant credit and/or advanced placement to students who have done well on the exam.

**Astronomy - Course 562** 

Grade 10, 11, 12

Semester

.5 Credit

Prerequisite: None

This course will address the Big Bang Theory, origins of the universe, evolution of stars and a closer look at the sun as a part of the solar system.

#### **College Preparatory Physics - Course 541**

Grade 11, 12 Full Year

1 Credit

**Prerequisite:** Two years of science courses with grades of 85 or higher & concurrent enrollment in Algebra II or higher, or teacher recommendation

Topics that may be covered by this course are: Newtonian Laws, motion, conservation of energy, work, gravitation, electricity and magnetism, and radiation. All of the topics mentioned above are addressed through laboratory experiences as well as in class examples. Technical writing skills to communicate lab results and techniques in problem solving are emphasized in this course. Students should already have a strong understanding of algebra and know the basics of trigonometry, such as the Pythagorean theorem, law of sines/ cosines and angle relationships.

#### **Conceptual Physics - Course 542**

Grade 11, 12 Semester .5 Credit

Prerequisite: None

Conceptual Physics places primary emphasis on understanding and investigating concepts in physics through lab investigations and projects. Topics may include: motion, gravitation, conservation of energy, the nature of matter, work, rotation, electricity and magnetism. Laboratory investigations introduce fundamental topics and techniques designed to foster deductive reasoning, creativity and cooperative learning. This course is for students who wish to learn more about the world around them. Not recommended for those seeking a 4-year college pathway.

#### **Human Anatomy and Physiology - Course 560**

Grades 11, 12 Full Year 1 Credit

**Prerequisites:** Passing grade in Biology 522

Human anatomy and physiology provides an overview of the major systems found in the human body. Topics may include chemical and cellular organization, tissue level of organization, the integumentary system, the skeletal system, the muscular system, the nervous system, the endocrine system, the cardiovascular system, the lymphatic system, the immune system, the respiratory system, the digestive system, the urinary system, and the reproductive system.

**Forensic Science - Course 561** 

Grades 11, 12 Semester .5 Credit

Prerequisite: None

Forensic Science is a semester long elective science course to expose students to the science knowledge and methodology applied to law. Topics will focus around the types of evidence collected and used in forensic science.

#### STEM: Introduction to Engineering Design (IED) Course 645e

Grade 9, 10, 11, 12

Full year 1 Credit

Prerequisite: None

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work.

#### STEM: Principles of Engineering – Course 650e

Grade 10, 11, 12

Full year 1 Credit

**Prerequisite:** Teacher Recommendation or passing score in IED

This is a physics engineering based class where students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation

#### STEM: Principles of Biomedical Science (PBS) - Course 645b

Grade 9, 10, 11, 12

Full year 1 Credit

Prerequisite: None

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

**STEM: Biotechnology - Course** 

**Grades 10, 11, 12** 

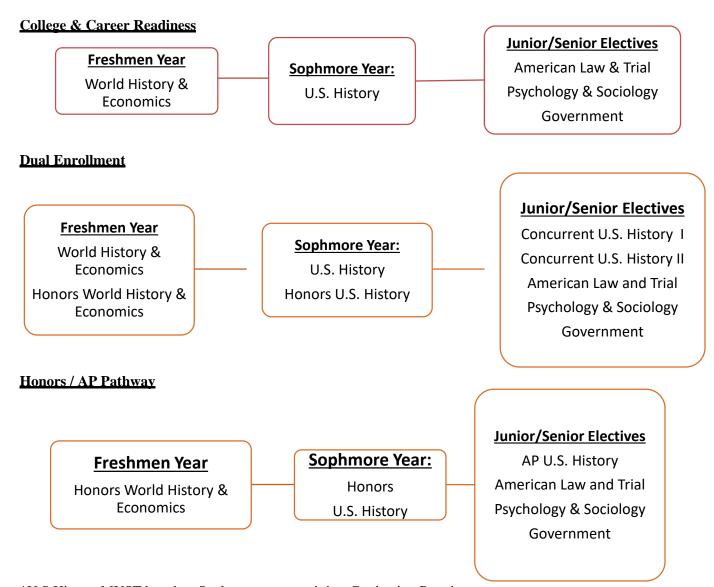
Full year 1 Credit

Prerequisite: Teacher Recommendation an 85 or better in AP Biology or Principles of Biomedical Science

Biotechnology is a hands-on, ab-based class in which you will explore careers in biotechnology with emphasis on central dogma of biology, DNA techniques, and bioethics. As you move through the course you will explore the applications of biotechnology development and techniques as applied to animal, aquatic, forensic, medical, and plant models. Throughout the semester, you will gain experience in various laboratory techniques.

#### **Social Studies**

#### **Social Studies Suggested Pathways:**



<sup>\*</sup>U.S History MUST be taken Sophomore year as it is a Graduation Requirement

#### World History & Economics - Course 211

Grade 9 Full Year 1 Credit

Prerequisite: None

This course will survey World History, Geography and Economics. The first portion of the course will focus on World history and will be following the time periods of: The Beginnings of Civilization; Growth of Civilizations; The World in Transition and the Beginnings of the Modern World. The second portion of the course will focus on content that focuses on the types, purpose and functions of economic systems and principles of personal finance. This course is designed to develop geography, economics, critical thinking as well as create a functional knowledge base that will enhance a student's understanding of World History and basic Economic theory.

#### **Honors World History & Economics - Course 210**

Grade 9 Full Year 1 Credit

**Prerequisite:** Meets the requirements of the Freshmen Honors Rubric

This class is designed specifically for those freshmen who truly excel in Social Studies and have demonstrated a keen understanding of and appreciation for history, geography and economics. Students must have already demonstrated a firm grasp and excel at writing and writing comprehension skills for placement in this course. This course requires a greater level of rigor and operates at an accelerated path covering topic areas in greater depth.

This course will delve deeply into World History, Geography and Economics. The first portion of the course will focus on World history and will be following the time periods of: The Beginnings of Civilization; Growth of Civilizations; The World in Transition and the Beginnings of the Modern World. Special attention will be placed on connections between periods and across standard connections. The second portion of the course will focus on content that focuses on the types, purpose and functions of economic systems and principles of personal finance. This course is designed to develop geography, economics, critical thinking as well as create a functional knowledge base that will enhance a student's understanding of World History and basic Economic theory.

#### U.S. History - Course 232

Grade 10 Full Year 1 Credit

Prerequisite: None

This course is designed to examine major turning points in U.S. History and will include exploration of national identity, migration, technology and labor, conflict, the U.S. on the world's stage and social and economic issues. Students will develop communication skills, reading comprehension, critical thinking and analytical writing skills. Assessments may take a variety of forms including, but not limited to, essay writing, homework assignments, tests, presentations and projects.

#### **Honors U.S. History - Course 230**

Grades 10 Full Year 1 Credit

Prerequisite: Teacher Recommendation, Honors World History & Economics

This course is for students who desire an in-depth study and quicker pace of U.S. History. This course makes more extensive use of supplemental readings and the interpretation of primary source documents than in the regular course; therefore, students will be asked to further develop their reading, thinking, and writing skills. The course is designed to offer students the opportunity to utilize analytical skills and factual knowledge to enhance their writing and rhetorical skills. Students who are considering the dual enrollment and Honors/AP Pathways should take this course.

#### **American Law and Trial - Course 208**

Grades 11, 12 Full Year 1 Credit

Prerequisite: None

American Law and Trial is an introductory legal course which investigates many topics including criminal law, civil law, trial rules, court systems, juvenile law, discrimination, and search and seizure law. In addition to studying contemporary legal cases, students will be participating in such experiences as mock trials, visitation to area courts, and attending lectures with guest speakers. Students may also participate in the Officer Ride-Along Program that is offered in conjunction with this course.

#### AP U.S. History - Course 231

Grades 11, 12 Full Year 1 Credit

**Prerequisite:** Teacher Recommendation

AP U.S. History is equivalent to two freshmen college-level courses. The course focus is on modern U.S. History including: The Industrial Age, Populism, Progressivism and the Gilded Age, America's economic and military expansion in the 20th Century, the Great Depression, civil rights and rise of Conservatism. Students will take the AP U.S. History exam in May. AP U.S. History incorporates the tenets of the Common Core and Maine Learning initiatives.

#### Concurrent U.S. History I - Course 246

Grade 11, 12 Full Year 1 Credit

**Prerequisite:** Teacher Recommendation

Students may choose to participate in early college history courses beginning in the junior year. History I is the first in the series of two courses offered to students. Participation in this course will allow students to earn college credit through University of Maine at Augusta's Aspirations Program along with meeting High School requirements. The course begins with exploration of the New World in the 15th century and continues through to post Civil War Reconstruction. Particular emphasis is given to the Revolutionary War, development of a new nation and the development of the U.S. Constitution, westward expansion, and the Civil War. Students maintain dual-enrollment at Brewer High School and the cooperating university resulting in transcripts at both institutions.

#### **Concurrent US History II - Course 247**

Grade 12 Full Year 1 Credit

**Prerequisite:** Concurrent U.S. History I

As with History I, participation in this course can occur through acceptance in the University of Maine at Augusta's Aspirations Program. This course will begin with a study of the Second Industrial Revolution and continues through the 20th century. Emphasis will be given to World Wars I and II, the Great Depression, the Civil Rights Movement, and the United States economic growth throughout the 20th century. Students must have successfully completed History I in order to take this course. Credit is granted at Brewer High School and the cooperating university resulting in dual transcripts and grades.

#### Psychology and Sociology - Course 256

Grade 11, 12 Full Year 1 Credit

Prerequisite: None

This course introduces students to the vast and diverse worlds of Psychology and Sociology. Students will gain an understanding of why people think and act as they do as they explore the systematic and scientific study of the behavior and mental processes of human beings and other animals. Additionally, this course will introduce students to the disciplined scientific study of human society in which students will explore ways in which their individual lives are shaped by society.

#### **Government - Course - 233**

Grade 11, 12 Full Year 1 Credit

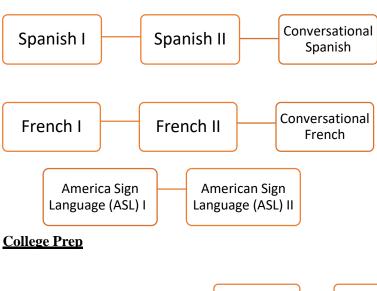
Prerequisite: None

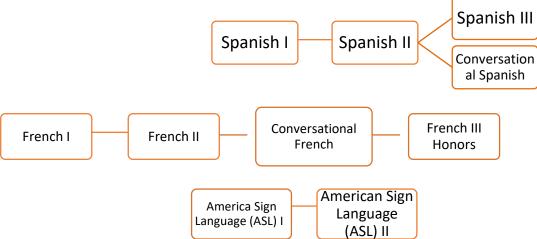
Government is a year-long, non-partisan, introductory course in conceptual ideas, institutions, policies, and roles of the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts to gain an understanding of the relationships and interactions of different political institutions and groups. Students will also develop skills in reading and interpreting data to make comparisons and develop evidence-based arguments for application in policy decisions.

# **World Languages**

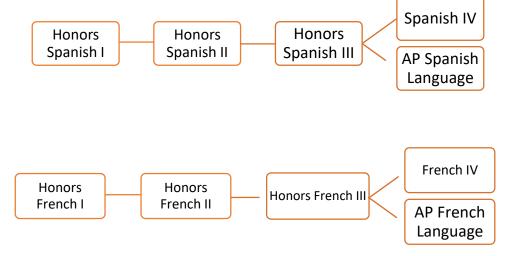
#### World Language Suggested Pathways:

#### **Career Readiness**





#### **Honors AP**



French I - Course 310 Grade 9, 10, 11, 12 Full Year 1 Credit

Prerequisite: None

Students in French I begin to speak, read and write through the three modes of communication; Interpretive, Interp

#### **Honors French I - Course 312**

Grade 9, 10, 11, 12 Full Year

1 Credit

**Prerequisite:** Meets the requirements of the Freshmen Honors Rubric.

Students in French I Honors begin to speak, read and write through the three modes of communication; Interpretive, Interpersonal and Presentational. Students are expected to use the language as a means of communication within and beyond the classroom. Students will develop an understanding of the structure of the language and will have the skills and confidence necessary to converse and write about familiar topics and events, to ask and answer questions, and to compare people, things, or events using strings of short sentences. They will be introduced to the people and culture of French speaking countries. They will investigate sports, school life, family life, recreation, hobbies, music and foods via in class reading and speaking activities. Cultural awareness will be enhanced by studying French-speaking regions of the world. Students will cover more than the traditional French I, at an accelerated rate with expanded vocabulary, grammar, and cultural experiences. Those completing Honors French I will, with teacher approval, be eligible for Honors French II. The course is conducted primarily in French.

French II - Course 320 Grade 9, 10, 11, 12 Full Year 1 Credit

**Prerequisite:** French I or Honors French I

French II students will continue to improve their abilities to use French through the three modes of communication; Interpretive, Interpersonal and Presentational. Students are expected to use language as a means of communication within and beyond the classroom. Students will expand their knowledge of vocabulary, grammar and cultural aspects of the French-speaking world, with a variety of performance based activities. The course is conducted primarily in French.

#### **Honors French II - Course 322**

Grade 10, 11, 12

Full Year 1 Credit

Prerequisite: Teacher Recommendation, Honors French I

French II students will continue to improve their abilities to use French through the three modes of communication; Interpretive, Interpersonal and Presentational. Students are expected to use French as a means of communication within and beyond the classroom. Students will expand their knowledge of vocabulary, grammar and cultural of the French-speaking world, with a variety of performance based activities.

Students will be expected to cover more than traditional French II with the addition of more reading, listening and speaking activities, focusing on traditional ideals and current issues. The course is conducted primarily in French. Those successfully completing Honors French II will proceed to Honors French III or Conversational French

#### French III – Course 325

Grade 11, 12 Full Year 1 Credit

Prerequisite: French II or Honors French II

Students will continue to expand their proficiency in speaking, listening comprehension, written communication, reading through the three modes of communication; Interpretive, Interpresonal and Presentational. Students will also review and study advanced grammar topics. Students are expected to use language as a means of communication within and beyond the classroom. Cultural material will be presented and vocabulary expanded through selected readings in periodicals and online resources. The course is conducted in French. It is expected that students commit to the daily use of the language in class.

#### **Honors French III - Course 330**

Grade 11, 12 Full Year 1 Credit

Prerequisite: French II or Honors French II

Students will continue to develop their proficiency in speaking, listening comprehension, written communication and reading through the three modes of communication; Interpretive, Interpresonal and Presentational. Students are expected to use French as a means of communication within and beyond the classroom. Cultural material will be presented and vocabulary expanded through selected readings in periodicals and online resources. The course is conducted primarily in French. It is expected that students commit to the daily use of the language in class.

After completion of Honors French III, students may take Conversational French, French IV, or AP French Language with teacher approval.

French IV - Course 342

Grade 11, 12 Full Year 1 Credit

Prerequisite: Teacher Recommendation, Honors French III

French Four continues the development and use of conversational and grammatical skills through the three modes of communication; Interpretive, Interpresonal and Presentational. Students are expected to use language as a means of communication within and beyond the classroom. Students will focus on building a more extensive and sophisticated vocabulary, with greater facility in the use of idiomatic expressions. Also emphasized is an ongoing awareness and understanding of issues affecting the Francophone world. This class is conducted in French.

#### **AP French Language - Course 340**

Grade 11, 12 Full Year 1 Credit

Prerequisite: Teacher Recommendation, Honors French III, or French III

The AP French Language course syllabus has been approved by the College Board. AP French continues the development and use of conversational and grammatical skills through the three modes of communication; Interpretive, Interpresonal and Presentational. The course content is for students to continue to develop and master skills in oral and written communication, with emphasis on a high level of proficiency in understanding the spoken language and expressing ideas orally and in writing. Students are expected to prepare for the Advanced Placement exam in May.

#### **Conversational French - Course 333**

Grade 10, 11, 12 Full Year 1 Credit

**Prerequisite:** Teacher Recommendation, 2 years of French

Conversational French offers novice and intermediate students of French useful practice in everyday communications. The conversations deal with everyday topics and situations in which students visiting a foreign country might find themselves. The culturally authentic conversations provide the student with invaluable preparation for a visit to a French-speaking region of the world. The topics selected are based on student interests and current events. Students are expected to participate orally in group exercises, free conversations and directed dialogues. The assessments are mostly oral. The purpose of this course is to help students sharpen their communication skills, increase their vocabulary and give them the confidence and ability to converse in a foreign language.

NOTE: Ideally, for a maximum achievement in a modern language, the department recommends this course along with second, third and/or fourth year level courses.

Spanish I - Course 311 Grade 9, 10, 11, 12

Full Year

1 Credit Prerequisite: None

Students in Spanish I begin to speak, read and write through the three modes of communication; Interpretive, Interpresonal and Presentational. Students are expected to use Spanish as a means of communication within and beyond the classroom. Students will develop an understanding of the structure of the language and will have the skills and confidence necessary to converse and write about familiar topics and events, to ask and answer questions, and to compare people, things, or events using strings of sentences. They will investigate sports, school life, family life, recreation, hobbies, music and foods via in class reading and speaking activities. Cultural awareness will be enhanced by studying Spanish-speaking regions of the world. The course is conducted primarily in Spanish

#### **Honors Spanish I - Course 313**

Grade 9, 10, 11, 12 Full Year

1 Credit

**Prerequisite:** Meets the requirements of the Honors Pathway.

Students in Spanish I Honors begin to speak, read and write through the three modes of communication; Interpretive, Interpretive

Students will cover more than the traditional Spanish I, at an accelerated rate with expanded vocabulary, grammar, and cultural experiences. Those completing Honors Spanish I will, with teacher approval, be eligible for Honors Spanish II. The course is conducted primarily in Spanish

Spanish II - Course 321

Grade 9, 10, 11, 12

Full Year 1 Credit

Prerequisite: Spanish I or Honors Spanish I

Spanish II students will continue to improve their abilities to use Spanish through the three modes of communication; Interpretive, Interpersonal and Presentational. Students are expected to use language as a means of communication within and beyond the classroom Students will expand their knowledge of vocabulary, grammar and cultural aspects of the Spanish-speaking world, with a variety of performance based activities. The course is conducted primarily in Spanish.

**Honors Spanish II - Course 323** 

Grade 9, 10, 11, 12

Full Year 1 Credit

**Prerequisite:** Teacher Recommendation

Spanish II Honors students will continue to improve their abilities to use Spanish through the three modes of communication; Interpretive, Interpretonal and Presentational. Students are expected to use Spanish as a means of communication within and beyond the classroom. Students will expand their knowledge of vocabulary, grammar and cultural of the Spanish-speaking world, with a variety of performance based activities.

Students will be expected to cover more than traditional Spanish II with the addition of more reading, listening and speaking activities, focusing on traditional ideals and current issues. The course is conducted primarily in Spanish. Those successfully completing Honors Spanish I will proceed to Spanish Three or Conversational Spanish

#### **Spanish III Course 324**

Grade 10, 11, 12 Full Year 1 Credit

Prerequisite: Spanish II or Honors Spanish II

Students will continue to expand their proficiency in speaking, listening comprehension, written communication, reading through the three modes of communication; Interpretive, Interpresonal and Presentational. Students will also review and study advanced grammar topics. Students are expected to use language as a means of communication within and beyond the classroom. Cultural material will be presented and vocabulary expanded through selected readings in periodicals and online resources. The course is conducted in Spanish. It is expected that students commit to the daily use of the language in class.

#### **Honors Spanish III - Course 331**

Grade 10, 11, 12 Full Year 1 Credit

**Prerequisite:** Spanish II or Honors Spanish II

Students will continue to develop their proficiency in speaking, listening comprehension, written communication, reading through the three modes of communication; Interpretive, Interpresonal and Presentational. Students are expected to use language as a means of communication within and beyond the classroom. Cultural material will be presented and vocabulary expanded through selected readings in periodicals and online resources. The course is conducted primarily in Spanish. It is expected that students commit to the daily use of the language in class.

After completion of Spanish III, students may take Conversational Spanish, Spanish 4, AP Spanish Language or AP Spanish Literature with teacher approval.

### **Conversational Spanish - Course 334**

Grade 10, 11, 12

Full Year 1 Credit

**Prerequisite:** Teacher Recommendation, 2 years of Spanish

Conversational Spanish offers novice and intermediate students of Spanish useful practice in everyday communications. The conversations deal with everyday topics and situations in which students visiting a foreign country might find themselves. The culturally authentic conversations provide the student with invaluable preparation for a visit to a Spanish-speaking region of the world. The topics selected are based on student interests and current events. Students are expected to participate orally in group exercises, free conversations and directed dialogues. The assessments are mostly oral. The purpose of this course is to help students sharpen their communication skills, increase their vocabulary and give them the confidence and ability to converse in a foreign language.

NOTE: Ideally for a maximum achievement in a modern language, the department recommends this course along with second, third and/or fourth year level courses

## Spanish IV - Course 343

Grade 11, 12
Full Year
1 Credit

Prerequisite: Teacher Recommendation, Spanish III

Spanish four continues the development and use of conversational and grammatical skills in all forms of communication, including speaking, listening, reading and writing. All grammar concepts from the previous years of study are reviewed and refined, with more attention on the exceptions to general rules than in previous study. Students will focus on building a more extensive and sophisticated vocabulary, with greater facility in the use of idiomatic expressions. Also emphasized is an ongoing awareness and understanding of issues affecting Spanish-speaking people throughout the world. This class is conducted primarily in Spanish.

## AP Spanish Language - Course 341

Grade 11, 12 Full Year 1 Credit

Prerequisite: Teacher Recommendation, Honors Spanish III

Students will continue to develop their proficiency in speaking, listening comprehension, written communication, reading through the three modes of communication; Interpretive, Interpresonal and Presentational. Students are expected to use language as a means of communication within and beyond the classroom. Cultural material will be presented and vocabulary expanded through selected readings in periodicals and online resources. The course is conducted primarily in Spanish. It is expected that students commit to the daily use of the language in class.

Course of Studies
Brewer School Department

American Sign Language I - Course 300

Grade 9, 10, 11, 12

Full Year 1 Credit

**Prerequisite:** None

Students in American Sign Language I (ASL) begin to use sign language through the three modes of communication; Interpretive, Interpersonal and Presentational. Students are expected to use ASL as a means of communication within and beyond the classroom. Students will develop an understanding of the structure of the language and will have the skills and confidence necessary to converse about familiar topics and events, to ask and answer questions, and to compare people, things, or events using strings of sentences. They will investigate sports, school life, family life, recreation, hobbies, music and foods via in class signing activities. Cultural awareness will be enhanced by studying Deaf Culture. The course is conducted in voiced English and ASL.

American Sign Language II - Course 301

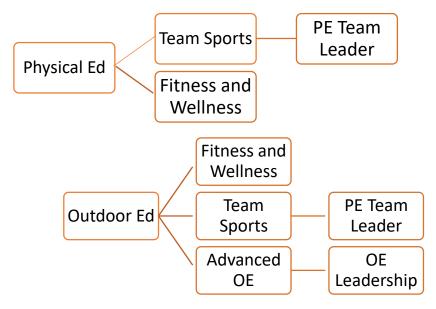
Grade 10, 11, 12 Full Year

1 Credit

**Prerequisite:** ASL I

American Sign Language II (ASL) students will continue to improve their abilities to use ASL through the three modes of communication; Interpretive, Interpresonal and Presentational. Students are expected to use ASL as a means of communication within and beyond the classroom. Students will expand their knowledge of vocabulary, grammar and cultural aspects of ASL, with a variety of performance based activities. The course is conducted primarily in ASL. Cultural awareness will be enhanced by studying Deaf Culture. The course is conducted in voiced English and ASL.

# Wellness



All Sophomore students are required to take Health



# **Physical Education - Course 001**

Grades 9, 10, 11, 12

**Full Year** 

1 Credit

**Prerequisite:** Students may not take both PE and OE in the same year for credit without permission from the department. Additionally, students who have already completed their PE requirement may not take this course again.

Physical Education consists of an introduction to personal lifelong fitness concepts, assessment of personal fitness levels, and development and implementation of a personal fitness plan based on each student's individual fitness level assessed by the Presidential Fitness Standards. Students will learn to navigate the Fitness Center with proper and effective use of the exercise equipment available at Brewer High School. Students will be introduced to and will participate in non-traditional individual, recreational and lifelong physical fitness activities. Upon completion of this course students will have a basic understanding of how to set up a fitness plan and the value of participation in lifelong physical activities. The course activities will include: Personal Fitness, Recreational Sports, Volleyball, Frisbee, Lifetime Activities and Team Sports

Fitness and Wellness - Course 014

Grades 10, 11, 12

Semester .5 Credit

**Prerequisite:** Successful completion of Wellness requirement through PE or OE.

Fitness and Wellness is a semester long course that will focus on students developing their own fitness plan and following it on a regular basis. This course offers an opportunity for students who are interested in training and physical fitness a chance to train under a structured and supervised program. Students will learn the physiological aspects of resistance training and then apply it to establish lifelong fitness habits. Students will learn to assess their fitness levels and change their programs as needed, as well as learn about the importance of nutrition, and how it affects their performance levels.

## **Team Sports - Course 019**

Grades 10, 11, 12

Semester .5 Credit

**Prerequisite:** Successful completion of Wellness requirement through PE or OE

This course is designed for the student who enjoys the cooperation and competitiveness of team sports and who would like to develop these skills with teacher and classmate support. In this class, students will improve their understanding of and skill with strategy, team concepts, communication, and fair play. Activities may include basketball, soccer, ultimate Frisbee, or others chosen by individual class sections.

## Physical Education Team Leaders - Course 004

Grades 11, 12 Full Year

1 Credit

Prerequisite: Teacher Recommendation, wellness requirement fulfilled

Team Leaders will meet every other day for the year. This course is offered to students who show a strong interest in the physical education program and can offer leadership skills. Team Leaders will be selected on the basis of attitude, leadership skills, and knowledge of the information taught.

### **Health - Course 002**

Grades 10, 11, 12

Semester .5 Credit

Prerequisite: None

Health must be successfully completed before graduation requirements can be fulfilled. Units are offered in these areas: personal health, nutrition, first aid, family life-relationships, communication, sexuality, mental health, preventing violence, chemical health and group problem solving. Many specialists, outside speakers, and hands on learning activities are used throughout the course. A brief overview of information covered in each unit is available in the curriculum manual in the high school Principal's Office for student and parent review.

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#### **Health Aide - Course 008**

Grades 10, 11, 12

Semester

.5 Credit

**Prerequisite:** Successful completion of health class, interview with health teacher, and approval of health teacher/teachers if applicable and knowledge of the content and leadership qualities exemplified in health class

Health Aide is for students who express a desire to continue to further their knowledge and gain leadership skills. Students are expected to participate in activities, facilitate groups, and lead group discussions. Limited to .5 credit.

## **Outdoor Education - Course 005**

Grades 9, 10, 11, 12

Full Year 1 Credit

Prerequisite: None

Outdoor Education provides an alternative to Physical Education for students interested in the outdoors and what it has to offer. Class is every other day and additional time outside of the school day. The high schools' ropes course is used to develop team building, problem solving and decision making skills. Basic instruction is provided in the areas of orienteering, paddling, cross-country skiing, camping (fall, winter and spring), first aid and many other areas of interest involved with the outdoors. Responsible personal and social interaction skills are also stressed throughout the course.

## **Advanced Outdoor Education - Course 007**

Grades 10, 11, 12

Full Year 1 Credit

Prerequisite: Successful completion of Outdoor Education

The most important aspect of Advanced O.E. is involvement. Students must be willing to explore new activities and adventures. They need to participate on a daily basis. Students will learn to think outside of the box, problem solve, leadership, work together, communicate, cooperate and much more. There will be a strong expectation to demonstrate and transfer the aforementioned skills. There is a great stress put on higher level thinking.

#### **Outdoor Leadership - Course 006**

Grades 10, 11, 12

Full Year

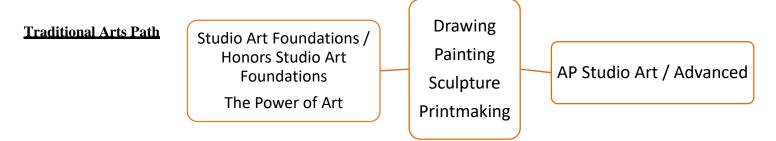
1 Credit

**Prerequisite:** Chosen by instructors on the basis of attitude, leadership skills and recreational skills. OE Leadership does not fulfill the graduation requirement for PE.

A full credit is offered to students who show a serious interest in the outdoor education program and can offer leadership skills in and outside of the classroom. Outdoor Leadership is a course offered every day and additional time outside of the school day! Leadership students are teaching assistants who also need to demonstrate knowledge of the information taught.

# **Visual and Performing Arts**

## **Visual Arts**



## Digital/Media Arts Path



## **Studio Art Foundations - Course 911**

Grades 9, 10, 11, 12

Full Year 1 Credit

**Prerequisite:** Interest in Art. Middle school art is recommended.

This course provides a broad introduction to studio art experiences which include drawing, painting, printmaking, sculpture & design. Students explore the purposes of art through experiential, and art historical learning experiences. Learners are introduced to group critiques, methods of selecting and preparing artwork for exhibition, and have opportunities to display their artworks in the classroom, school, and/or broader community. Evaluation is based on studio/ in-class artworks as well as sketchbook practices, artistic planning work, and written work such as self-reflections. Learners are expected to have a sketchbook and a pencil for their artistic process and planning work.

## The Power of Art - Course 920

Grades 9, 10, 11, 12

Full Year 1 Credit

Prerequisite: None

Through this course, students will explore how images, architecture and environments shape our ways of understanding our world and ourselves. Focusing on both western and global art, this survey course provides an introduction to art and its histories. Learning to look closely and analyze what you see provides a critical lens for examining the visual world from diverse perspectives. This course satisfies the fine arts credit requirement while utilizing a non-studio based curriculum.

## **Honors Studio Art Foundations - Course 915**

Grades 9, 10, 11, 12

Full Year 1 Credit

**Prerequisite:** Teacher Recommendation or Meets the Honors Freshman Rubric

Is for students who have shown both skill and a dedication to learning about art in middle school. The class may include: Drawing, Painting, Sculpture, Printmaking, Poster Design, and Contemporary Craft. This class encourages students to explore current art issues, and develop finished well framed art work. Class work covers the equivalent of 1½ years of art making. Students are encouraged to have good attendance and a willingness to work at an honors level. This course allows students to explore several media and subject matter in depth. Students will build a portfolio of completed framed art pieces. Evaluation is based on in class works as well as artistic process and planning, including self-assessments.

## **Drawing - Course 912**

Grades 10, 11, 12

Semester .5 Credit

Prerequisite: Teacher Recommendation or 77 or above in Studio Art Foundations/Honors SAF

This course is for students interested in developing their drawing ability and building a strong art portfolio. This course emphasizes drawing not only as an art form but a means of personal expression. Along with art theory and art history, students will also learn ways to display art and will participate in school wide art exhibits. This course builds upon the skills and concepts learned in Studio Art Foundations.

#### Sculpture - Course 913

Grades 10, 11, 12

Semester

.5 Credit

Prerequisites: Teacher Recommendation or 77 or above in Studio Art Foundations/Honors SAF

This course is where students explore the processes involved in creating three-dimensional art. Art experiences will include ceramics as well as other sculptural materials such as plaster, cardboard, and wire. Students are expected to demonstrate technical skills and craftsmanship while using effective studio practices to understand, respond and reflect on artistic problems related to 3D media. Along with art making, students will study the influences of art in society art. This course builds upon the skills and concepts learned in Studio Art Foundations. Students are expected to display their work in the school and community.

#### **Graphic Design - Course 725**

Grades 10, 11, 12

Semester

.5 Credit

Prerequisite: Teacher Recommendation or 77 or above in Studio Art Foundations/Honors SAF

The course will focus on how we communicate through art and design. Students will expand upon their prior knowledge of the elements and principles of design, using computer programs such as Adobe photo shop and Illustrator to generate unique solutions to design problems. Students will utilize examples from the visual culture of marketing & advertising, multicultural art, textile, architecture, and functional objects.

#### **Advanced Art - Course 916**

**Grades 11, 12** 

Full Year

1 Credit

**Prerequisite:** Teacher Recommendation or Studio Art Foundations/Honors SAF at least one of the intermediate level courses (Drawing, Painting, Sculpture, Printmaking, Graphic Design)

This course is for students interested in pursuing a career in the visual art field, who are highly motivated, or who would like to work toward preparing an AP portfolio. Students will have the opportunity to review and explore with a variety of media while working toward preparing an art portfolio. After a time of review and exploration, students will then develop a body of work that investigates an idea of personal interest to them.

#### Painting - Course 921

Grades 10, 11, 12

Semester

.5 Credit

**Prerequisite:** Teacher Recommendation or 77 or above in Studio Art Foundations/Honors SAF

This course is for students interested in developing a strong art portfolio. Students learn in a demonstration/studio based atmosphere. Second year fine art classes provide students with greater opportunities to explore their personal interests. This course will have students explore many different types of painting and go in depth with control and skill building strategies with these materials. This course emphasizes painting not only as an art form and means of personal expression, but also as a way to increase visual literacy; understanding what and how we see. Along with art theory and art history, students will learn ways to display art and will participate in school wide art exhibits. Student evaluation is based on in class studio art, participation in class critiques, notes, portfolios and readings.

#### **Printmaking - Course 922**

Grades 10, 11, 12

Semester

.5 Credit

Prerequisite: Teacher Recommendation or 77 or above in Studio Art Foundations/Honors SAF

Printmaking introduces students to many ways of creating groups or multiples of artworks. Purposeful elements of Art and Principles of Design will be stressed within print compositions. A variety of printmaking techniques will be utilized including block printing, etching and stenciling. In order to succeed in this class, students must meet the required criteria for all assignments, question and critique their own work as well as the work of others, and approach each art process with a positive and open mind. This course builds upon the skills and concepts learning is Studio Art Foundations.

## <u>Yearbook Publication - Course 152</u>

Grades 11, 12 Full Year 1 Credit

**Prerequisite:** Instructor's permission

This class is charged with the entire creative responsibility of publishing the Trident, BHS's yearbook. This includes photography, interviewing, writing, marketing, computer layout, multimedia design, and professional presentation. Because the class functions as a publishing firm, teamwork and meeting deadlines are essential. Students who are interested must complete an online application form, ask their current English teacher, and 1 other teacher to submit an online recommendation form. Ten students will be chosen through this process. The link for the application is: https://forms.gle/8Yqx1Mm1MVmZGBVa9

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Photography 1 - Course 728

Grades 10 (with teacher permission), 11, 12

Semester

.5 Credit

**Prerequisite:** Teacher Recommendation or Studio Art Foundations/Honors Studio Art Foundations or Multimedia Design

This course will utilize photography as the primary media for student expression. Students will develop an understanding of the technical aspects of the camera, learn art concepts through the Elements of Art and Principles of Design, demonstrate basic knowledge of editing software, explore and discuss digital imagery in society, and create projects that yield individual creativity and personal expression in a final portfolio. Students will be given weekly shooting assignments within a variety of topics as well as be expected to take part in group and individual critiques of their work.

## **Photography II- Course 729**

Grades 11, 12 Semester .5 Credit

**Prerequisite:** Teacher Recommendation or Photography I

This course is designed for students who have a strong interest in photography and wish to improve their skills as well as study areas related to photography more extensively. Along with continued digital photography exploration, students will also be introduced to traditional darkroom photography. Students interested in this course should have successfully completed digital photography and should have a thorough understanding of the camera, photo editing programs and the Elements and Principles of Design as they relate to photography. Students taking this class will have the opportunity to build a quality digital portfolio and possibly submit for AP 2D Studio Art credit.

### AP Studio Art & Design- Course 917/918

Grade 12 Full Year 1 Credit

**Prerequisite:** Teacher Recommendation and Studio Art Foundations/ Honors SAF and one intermediate art course (Drawing, Painting, Sculpture, Printmaking, Graphic Design)

This course is designed to encourage the development of creative and critical thinking skills in highly motivated and independent thinking art students. Students in this course will have the opportunity to do college-level work and to possibly earn college credit. In order to be successful in this class, students must have a strong understanding of art media, art skill and a good work ethic. There is a considerable amount of homework including summer art assignments. The AP exam consists of 2 sections of up to 20 finished artworks that demonstrate skillful synthesis of materials processes and ideas and include a sustained investigation that shows practice, experimentation and revision. This class allows for students to sign up to the 2D Design or Drawing sections.

## **Performing Arts**

**Concert Band - Course 930** 

Grades 9, 10, 11, 12

Full Year

1 Credit

**Prerequisite**: Prior instrumental band experience, students who have less than two years of playing experience need to take Introduction to Band, or permission from the instructor

The Concert Band provides an opportunity for students who play wind and percussion instruments to perform at many different school and community functions. The band rehearses and performs musical literature of varying styles and difficulty. The Concert Band may perform several concerts, festivals, parades, ceremonies and competitions throughout the year. The Concert Band rehearses on Orange days, block one only during the school year. The course continually builds on elements of music performance through challenging repertoire, rehearsal, and performance. Students will develop skills for self-improvement, teamwork, public presentation, and performance expectations throughout the year. Students are required to attend all scheduled performances during the year. Students that play guitar or piano need instructor approval.

## **Concert Choir - Course 960**

Grades 9, 10, 11, 12 Full Year

1 Credit

Prerequisite: None

Concert Choir is open to all students grade 9, 10, 11, 12. This course will explore healthy vocal technique, proper signing skills and music literacy through choral music from a variety of time periods, cultures and genres. Throughout the rehearsal and performance processes students will develop appropriate rehearsal and performance etiquette. In addition to completing various assessments during class time members of Concert Choir are required to perform at concerts and various events throughout the school year.

#### **Jazz Ensemble - Course 937**

Grades 9, 10, 11, 12

**Full Year** 

Also functions as the primary band for Groove Factor

.5 Credit

Prerequisite: Teacher Recommendation, prior jazz experience, must be enrolled in concert band

The Jazz Ensemble is a highly competitive class which meets before school. The course focuses on the history of music through listening, lecture, practice, and performance. Students are engaged in many different styles of jazz and will demonstrate their learning through public and adjudicated performances. Audition or instructor permission is required. Students must also be enrolled in the concert band. This is a highly competitive course and students enrolled are required to participate in all performances. Performances include public concerts, district and statewide competitions, out-of-state competition, and performances at other schools.

Students are encouraged to audition for Jazz All-State in the fall. Students are <u>required to be enrolled in</u> concert band or must apply for a waiver from the instructor.

Music Theory - Course 950 Grades 10, 11, 12

Full Year 1 Credit

Prerequisite: Teacher Recommendation, two years' musical performance background

This course covers all elements of music from basic note and rhythm reading to harmonic and melodic analysis of musical form.

## **Introduction to Guitar - Course 952**

Grades 9, 10, 11, 12 Semester 1 Credit

Prerequisite: None

Introduction to guitar is a hands-on, student-centered course focusing on learning how to play and appreciate the guitar. Students will learn how to tune, play all open chords, barre chords, simple picking rhythm patterns, and songs. Students will immediately be able to apply skills and concepts after each class.

Required Materials: Students will need an <u>acoustic guitar</u>. An acoustic guitar is preferable due to the tonal quality and development of finger dexterity and sound. <u>Other Materials</u>: 3 ring binder, Pencils, Guitar picks, Guitar Strap

## **Digital Audio and Stage Lighting - Course 962**

Grades 11, 12 Full Year 1 Credit

Prerequisite: None

The Digital Audio course is a rigorous, in-depth, hands-on experience. Students will learn all aspects of basic and intermediate audio to include live sound and studio recording. Students will also work at the performing arts center at events throughout the school year in a variety of areas. Students MUST have the ability to get to and from events. This course requires students to be able to attend functions and classes outside of the school day.

Students will have opportunities to act as both audio and lighting tech at many events, be involved in stage management, and act as producers, and other behind the scenes activities. Students will also record both audio and video for commercial use. Students will use state-of-the-art sound and lighting equipment and software. This course prepares students for post-secondary school in sound, mixed media, and communications.

Theater Arts - Course 150 Grades 9, 10, 11, 12 Full Year 1 Credit

Prerequisite: None

Theater Arts is an elective class that provides students with an overview of all aspects of theater production and a strong focus on acting. Students will learn about the history of theater as well as different genres and styles of plays and will get hands-on experience in vocalization and projection, movement and physicality, character development, and improvisation. The class will also explore the basics of lighting, sound, costume and set design, and stage management.

No experience is needed but interest in theater and a willingness to perform are requirements.

## Sports band (The Groove Factor) - Course 932

Grades 9, 10, 11, 12 Full year

.5 Credit

Prerequisite: Teacher Recommendation

The Sports band performs at various athletic events throughout the school year. Students do not need to be in a performing group to participate. This group performs rock, blues, and other fan favorites. The group begins two weeks before the start of the school year and rehearses during the fall, usually one evening per week. Instrumentation is limited and students are encouraged to contact the music department for more information. Students can earn their varsity letter after two seasons of performance.

During the school year, there are more opportunities for student performance. These include saxophone ensemble, brass quintet, flute trio, brass ensemble, percussion ensemble, ceremonial band, and many others. The music department is also proud to offer performance opportunities like Jazz Café, recital night, and other performance venues.

#### **Introduction to Band - Course 935**

Grades 9, 10, 11, 12 Full year 1 Credit

Prerequisite: None

Introduction to Band is a music exploratory course where students will have a hands-on approach and instruction in learning a new instrument, basic music theory, and music appreciation. This course is designed for students who do not currently play a woodwind or brass instrument, would like to learn a secondary instrument, and those students that may not have played an instrument for over a year, or less than two years. Students will need to have one of the following instruments: Flute, Clarinet, Saxophone, Trumpet, and Trombone. Students who do not have access may rent one from a local music vendor. Information on rental will be provided during the first week of class. The music department does have a limited supply of instruments that are available on a priority basis.

# **Technology**

**Computer Applications - Course 642** 

Grades 9, 10, 11, 12

Full Year 1 Credit

Prerequisite: None

This course is designed to help students develop skills and a working knowledge of applications that can assist in other classes. It covers the following applications Microsoft Office, Word, Excel (spreadsheet), PowerPoint, and Google. In addition to the above, computers will be used to teach graphics, troubleshooting, multimedia, and desktop publishing. Enhanced information seeking skills using the internet will also be covered. **This class fulfills a Fine Art credit.** 

### Web Page Design - Course 638

Grades 10, 11, 12 Full Year 1 Credit

Prerequisite: None

Web Page Design is a course that teaches students how to create and design professional-quality web pages using HTML, CSS, and JavaScript. This course covers the fundamental skills needed to structure, style, and add interactivity to web pages, as well as web design principles and best practices. Students will complete a variety of projects to practice and apply their new skills. By the end of the course, students will be able to create functional, user-friendly, and visually appealing web pages and have a strong foundation in web development technologies. **This class fulfills a Fine Art credit.** 

#### Multimedia Design - Course 639

Grades 9, 10, 11, 12

Full Year 1 Credit

Prerequisite: None

This year long course will cover many different aspects of computer generated multimedia productions. It will include sections on Photoshop, PowerPoint, Adobe Animate, and Pinnacle Studio. This course allows students to design, create, and compose professional multimedia presentations. The material will be covered using interactive instruction along with single and group projects. Students will learn to incorporate sound, video, graphics, digital imagery, text, and animation into their multimedia presentations. **This class fulfills a Fine Art credit.** 

### **Introduction to Computer Science- Course 635**

Grades 9, 10 11, 12

Full Year
1 Credit

Prerequisite: None

This course will teach students the fundamentals of programming using the JavaScript and Python languages. Student will learn the basic syntax and structure of these languages, as well as how to write code to solve problems and create interactive programs. Through a series of hands-on projects and exercises, students will develop their skills in logic, problem-solving, and computer science concepts, laying the foundation for further study or a career in the field. **This class fulfills a Fine Art credit.** 

Game Design with Unity and C# - Course 730

Grades 10, 11, 12

Full Year 1 Credit

**Prerequisite:** Introduction to Computer Science Languages

This course teaches students how to design and develop video games using Unity and C#. Students will learn the fundamentals of game design and development, including how to create 2D and 3D games, design levels and gameplay mechanics, and use Unity and C# to program and debug their games. Students will work on projects to practice their skills and apply what they have learned, including developing their own original game concepts and modifying and building upon existing game assets. The course also covers the creative and artistic side of game design, including character and level design, storytelling, and user experience. By the end of the course, students will have a strong understanding of how to design and develop games and will have developed a portfolio of game projects. **This class fulfills a Fine Art credit.** 

# Jobs for Maine's Graduates (JMG)

**Career Exploration - Course 099** 

Grade 10 Semester

.5 Credit-Required for Graduation

Prerequisite: None

Career Exploration is required in the sophomore year. This course is designed to assist students with exploring careers and developing skills necessary to make meaningful decisions about their career choice. Students will be made aware that there are many factors to consider before selecting a suitable career. This course will assist the students in assessing their personal strengths and weaknesses as they relate to career decisions through various self-assessments. This course will aid the student in developing strategies to make an effective transition from school to work. The student will develop skills in this course that are generic to all occupations, such as properly preparing career documents needed to obtain employment. The student will be able to recognize that career enhancements and career changes are common and that they need to be prepared with the proper tools, resources, and guidance to make informed decisions about their career choice throughout their lifetime. Gaining knowledge in personal finance such as banking basics, employment & taxes, credit & debit, investment basics and insurance is also an important aspect of this class.

## **College 101 – Course 093**

Grade 12 Semester 1 only .5 credit

Prerequisite: None

This course is designed to give students planning to apply to a two or four-year college an opportunity to focus on the college application process during the fall semester. With a step-by-step, in-class approach, students will engage in a variety of exercises and learn what it takes to navigate the overwhelming application process; students will engage with guest speakers that are relevant to the topic; students will be guided through the financial aid process. Students must be prepared to apply to at least two (2) colleges and file their FAFSA as a part of the course requirements. By the end of the course, students will have a clear understanding of how to be successful in transitioning into the college setting.

## Success in the World of Work – Course 751

Grade 11, 12 Semester .5 credit

Prerequisite: None

This course is a pre-requisite for an Extended Learning Opportunity (ELO). During this course, students will further their exploration of skills and interests identified during their Career Exploration experience that occurred during their Sophomore year. The course is designed with individual student interests in mind. Throughout this course, students will reinforce prior learning involving their abilities and professional skills and will learn many workplace topics such as application/interviewing skills, workplace ethics, workplace health and safety. Students will also be exposed to life skills including money management, banking, credit and taxes. This course will incorporate an on-line text book as well as guest speakers, self-reflection and self-discovery.

# **Air Force Junior Reserve Officer Training Corps Program (AFJROTC)**

## **Air Force JROTC Course 830**

Grade 9, 10, 11, 12

Full Year

1 Credit

**Prerequisite:** Voluntary enrollment. Willingness to maintain dress and appearance standards, and participate in cadet corps activities.

The mission of the AFJROTC program is to "Develop citizens of character dedicated to serving their nation and community." The goals of the AFJROTC program are to instill values of citizenship, service to the United States, personal responsibility, and a sense of accomplishment.

The objectives of AFJROTC are to educate and train students in citizenship and life skills; promote community service; instill a sense of responsibility; and develop character and self- discipline through education and instruction in air and space fundamentals and the Air Force's core values of "Integrity First, Service Before Self and Excellence In All We Do." Additionally, AFJROTIC encourages students to think about life after high school and the many pathways available to them. Students are highly encouraged to start thinking about career pathways by identifying their abilities, strengths, and weaknesses through the use of several self-assessments. The curriculum is divided into three parts:

Aerospace Science (AS is 40% of the curriculum) study includes the history of aviation, cultural studies of major world regions, science of flight, space exploration, survival and corps management.

Leadership Education (LE is 40% of the curriculum) offers students many opportunities to shape their character. Students will learn about character development while many character-building topics are discussed. Elements of good citizenship are instilled in students.

Physical Training (PT) and Wellness (PT is 20% of the curriculum) is an official and integral part of the Air Force Junior ROTC program. The objective of the PT Program is to motivate cadets to lead healthy, active lifestyles beyond program requirements and into their adult lives. The 40/40/20 curriculum is accomplished by blending classes with 9, 10, 11, 12th graders so there is a good mix of experience levels. This provides more senior cadets with ample opportunity to teach, train, and mentor less experienced cadets.

The curriculum changes every year so there is no duplication (first-year cadets always receive the intro material which may be taught by senior cadets). Cadets are expected to take "ownership" of the Cadet Corps. This is demonstrated by planning, organizing, delegating, briefing, and executing a multitude of requirements. Several opportunities exist for cadets of all experience levels to take part in. These include Color Guard, and Air Rifle Team. Community service is fun and rewarding, and cadets volunteer at Bangor Humane Society, parades, Wreaths Across America, Walks to End Alzheimer's and Pancreatic Cancer, and the USMC Toys for Tots. **May fulfill Career Exploration Graduation Requirement** 

## Air Force JROTC - Corps Leadership and Management - Course 831

**Grade 11, 12** 

Full Year

1 Credit

**Prerequisite:** Two (2) credits of Air Force Junior ROTC Course 830 or Air Force JROTC instructor recommendation. Voluntary enrollment. Willingness to maintain dress and appearance standards, and participate in cadet corps activities.

The mission of the Air Force Junior ROTC program is to "Develop citizens of character dedicated to serving their nation and community." The goals of the Air Force Junior ROTC program are to instill values of citizenship, service to the community and the United States, personal responsibility, and a sense of accomplishment.

The objectives of Air Force Junior ROTC are to educate and train students in citizenship and life skills; promote community service; instill a sense of responsibility; and develop character and self-discipline through education and instruction in air and space fundamentals and the Air Force's core values of "Integrity First, Service Before Self, and Excellence In All We Do." Additionally, Air Force Junior ROTC encourages students to think about life after high school and the many pathways available to them.

The curriculum is divided into three parts:

Aerospace Science (AS) 220/300 study includes cultural studies of major world regions and space exploration. Cadets will utilize our two flight simulators and several drones to gain confidence in their abilities to perform out-of-the-norm skills and apply knowledge gained from multiple years in Air Force Junior ROTC. This accounts for 40% of the curriculum.

Leadership Education (LE) 300/400 offers our more senior cadets many opportunities to hone their leadership and management skills. Cadets will work together to shape the cadet corps and learn to run an organization. Cadets will continue to learn more about themselves and the career opportunities they want to explore. This accounts for 40% of the curriculum.

Physical Training (PT) and Wellness is an official and integral part of the Air Force Junior ROTC program. The objective of the PT Program is to motivate cadets to lead healthy, active lifestyles beyond program requirements and into their adult lives. Cadets in this course will develop a weekly physical fitness regimen that will, in turn, be taught to students in the AFJROTC 830 course. PT and Wellness is 20% of the curriculum.

The curriculum changes every year so there is no duplication (first-year cadets always receive the intro material which may be taught by senior cadets). Cadets are expected to take "ownership" of the Cadet Corps. This is demonstrated by planning, organizing, delegating, briefing, and executing a multitude of requirements. Several opportunities exist for cadets of all experience levels to take part in. These include Color Guard, and Air Rifle Team. Community service is fun and rewarding, and cadets volunteer at Bangor Humane Society, parades, Wreaths Across America, Walks to End Alzheimer's and Pancreatic Cancer, and the USMC Toys for Tots. **May fulfill Career Exploration Graduation Requirement** 

# **Additional Options**

**College Accounting - Course 634** 

Grades 11, 12 Full Year 1 Credit

**Prerequisite:** None

This course is designed for students that want to start their own business and need basic accounting principles. College Accounting covers the fundamental principles and procedures of accounting, including journalizing, posting, adjusting entries, closing procedures, and preparing financial statements. This course can prepare you for an entry-level job as an accounting clerk or help to explore accounting as a possible career. It is also used to attain a sound knowledge of keeping books for personal use. Students will not only develop a working knowledge of manual accounting, but will also develop a working knowledge of computerized accounting if time permits. \*Can earn accounting credit through Husson University.

## Personal Law - Course 648

Grades 11, 12 Semester .5 Credit

Prerequisite: None

This law course is designed for students interested in furthering their knowledge on their rights and responsibilities or are interested in a career in law enforcement. Topics include your rights and responsibilities, family law, employment discrimination, contracts, legal agreements, and liability of businesses and consumers. Guest speakers will be invited to share their expertise in various areas.

#### Personal Finance - Course 646

Grades 11, 12 Semester .5 Credit

Prerequisite: None

This semester course is designed for students desiring the knowledge and skills necessary not only for making sound personal financial decisions but also equip them with the skills necessary for possible entry-level positions in a bank or credit union. Students will study our system of government money management, insurance, income tax preparation, as well as banking principles and services including credit card use, loans, savings and investments. Bank functions and procedures including check writing and reconciliation will provide the student with hands-on experience in the field of banking. Guest speakers from the business community will speak to the class throughout the semester.

Internship Grades 11, 12 Semester or full year .5 or 1 Credit

**Prerequisite**: Permission form available in Student Services

Internships are one of the best ways for a student to learn about the world of work. Juniors who have an interest in a particular area can meet with their guidance counselor to explore the value of an internship for their senior year. These internships are volunteer experiences in local businesses or schools. A minimum commitment of six hours per week is required for a full credit yearlong internship.

Supervisors at the "job" site complete an evaluation provided by the Guidance office on a quarterly basis. Grading will be done as Pass/Fail. It is not intended that an internship would replace an academic course needed for post-secondary education; rather it would supplement a student's high school program and clarify career direction. Recent seniors have explored careers in education, emergency medicine, radiography and journalism/broadcasting.

## **Introduction to Forestry Management - Course 089**

Grades 11, 12 Full Year 1 Credit

Prerequisite: None

The fundamental purpose of this course is to provide students with an opportunity to learn about and experience the Forestry Industry and the opportunities it provides for employment in Maine. Students will explore Forest Management Standards in the areas of Silvics, Land Measurement and Mapping, Forests Measurement, Multiple Use Management, Harvests and Regeneration, Inquiry and Problem Solving, Scientific Reasoning, Communication and Implications for Forest Management. Beyond the classroom experiences students will be engaged with the natural setting of Forestry Management, they will be spending time applying skills learned in the Maine woods. In addition to the application of skills in the great outdoors, students will meet with and learn from those who have chosen professions in the Forestry Industry. The exposure to multiple aspects of the industry will allow students to explore potential options for their own futures.

## Introduction to Forestry Management II - Course 096

Grade 12 Full Year 1 Credit

**Prerequisite**: Introduction to Forestry Management and instructor permission

This course is a continuation of skills learned in Introduction to Forestry Management.

#### Senior Exhibition – Course 822

Grade 12 Full Year 1 Credit

**Prerequisite:** Must be in Honors Diploma Program

The Senior Exhibition is one of two options fulfilling the senior requirements for the **Honors Diploma Program** (the other being the Senior Seminar). The Senior Exhibition allows students to pursue independently an area they find especially interesting. The Senior Exhibition consists of two parts: the research paper and the presentation. Research proposals are due in April of the junior year. Students will be assigned a community expert who will work closely with them, providing resources and guidance. The research paper will be due by December 1st. The research findings will be presented during the second semester. **This course may count as a Fine Art credit.** 

#### <u>Senior Seminar – Course 820</u>

Grade 12 Full Year 1 Credit

**Prerequisite:** Successful completion (grade B or higher) of an honors or AP English course.

This course is one of two options for fulfilling the senior requirement for the **Honors Diploma Program** (the other being a Senior Exhibition Project). The course will use an interdisciplinary approach to study eight individuals in history from the Italian renaissance to the United States civil rights movement. Units on each individual will last 3-4 weeks and students will read primary source documents, listen to lectures on audio podcasts, attend weekly Socratic seminars, and submit a written paper at the end of each unit. The course will be supported by a website as well as cultural experiences such as concerts, plays, lectures at colleges, and field trips. There will be a time commitment outside the school day for the cultural experience as well as the seminar, which meets at 7:00-7:45 AM on Fridays. **The course may qualify as a Fine Art credit.** 

# **United Technologies Center (UTC)**

Brewer High School is one of seven public high schools participating in technical education programming offered at United Technologies Center, 200 Hogan Road in Bangor.

Students attending UTC (Maine's premier technical high school) have an opportunity to increase academic achievement while learning industry standard technical skills. Through these career exploration experiences, students are better able to choose appropriate post-secondary school and career paths.

College credits through the Dual Enrollment program are offered at minimal cost along with Articulation Agreements with a large number of colleges and universities throughout Maine. Many students get a "jump on college" by earning anywhere from 6 to 12 transferable college credits over a 1 or 2-year period. (Transferability may depend upon the post-secondary school and/or major in some cases.)

Students attend UTC for a half-day (morning or afternoon session) and complete other academic requirements, participate in extracurricular activities and school life the other half of the day. United Technologies Center is accredited by the New England Association of Schools and Colleges, Commission on Technical and Career Institutions.

# **Special Programs**

### **ALPHA Program**

Students occasionally require a different learning environment than the traditional classroom. The ALPHA program is an alternative educational program for students who would otherwise attend Brewer High School. Students are provided with an alternative educational environment that includes individualized experiences, personalized learning and a flexible schedule. A sense of community is also fostered in the ALPHA program.

## Nu Program

The Nu Program is another alternative option that Brewer High School offers for students that require a different learning environment than the traditional classroom. Students in the Nu program take core classes on-line with a Nu Specialist and are able to take other classes in person. It is a flexible program that offers multiple choices to getting a Brewer High School Diploma. While most of the courses are on line, students are required to meet with the Nu Specialist on a weekly basis to make sure students are still accomplishing the work needed. The Nu Specialist will help students stay on track and provide a personalized program that will meet the needs of the student.

## **Special Education**

The Special Education program at Brewer High provides for the needs of students who have been identified with an education-related disability as defined by Maine and federal guidelines. Our goal is to help students overcome learning difficulties so they will achieve success both in high school and beyond. Academic courses taken through the Special Education Department are credited toward graduation requirements. Specific courses offered to students in the Special Education Department will be decided through the students Individualized Education Team process.

#### **Transitional Advantage Program (TAP)**

The Transitional Advantage Program is designed to assist students who are faced with significant challenges. There is extensive focus upon activities of daily living, and work experiences as they pertain to each individual. Our intent is to transition students from high school into meaningful and productive post-secondary situations. As they transition through their high school years, students will engage in skill development initiatives and improve their ability to self-advocate. This will enhance their chances of attaining residential, community, and/or vocational opportunities that best match their needs and desires. Accomplishing these goals typically involves the collaboration of a strong team – students, parents, teachers, support staff, friends, adult agency providers, and community organizations.

Courses offered through the Transitional Advantage Program will include, but are not limited to, Functional Academics (i. e. English, math, science and social studies), life skills, and work experience opportunities. The status of a BHS diploma vs. a certificate of completion will be determined on an individual basis according to each student's Individual Education Program (IEP).

## Social Emotional Learning (SEL) Program Description

The BHS Social Emotional Learning Program is a special education program designed to meet the individual learning needs of identified students who require a more restrictive educational setting beyond the traditional resource room classroom due to social, emotional and/or behavioral regulation challenges. The SEL program is a structured, therapeutic program with a higher staff to student ratio to support the varying academic and functional needs of students enrolled to achieve credit toward their regular high school diploma. The SEL program is designed to give students an individualized approach within a small group setting to manage their social emotional wellbeing while targeting academic growth. The SEL program provides adequate space and privacy for students to manage and process emotion during times of need. Students enrolled in the SEL program may be recommended to receive whole or partial placement within the program as well as related services such as counseling, social work and/or psychological services. Such recommendations are made through the IEP team process.