

MARANACOOK COMMUNITY HIGH SCHOOL



PROGRAM OF STUDIES

24-25

TABLE OF CONTENTS

| | |
|--|---------------------------|
| Principal's Message | <u>3</u> |
| Directory | <u>4</u> |
| MCHS Core Values and Beliefs Statement | <u>5</u> |
| Curriculum and Graduation Requirements | <u>6</u> |
| Guidance Services | <u>8</u> |
| Course Selection Information | <u>9</u> |
| Academic Preparation Chart | <u>10</u> |
| Honors Expectation | <u>12</u> |
| Dual Enrollment | <u>13</u> |
| Report Cards and Progress Reports | <u>14</u> |
| Dropping a Class | <u>15</u> |
| English Language Arts | <u>16</u> |
| Mathematics | <u>21</u> |
| Science | <u>27</u> |
| Social Studies | <u>31</u> |
| Health and Physical Education | <u>37</u> |
| Visual Arts | <u>41</u> |
| Performing Arts | <u>46</u> |
| Industrial Arts | <u>50</u> |
| World Language | <u>53</u> |
| Career Preparation | <u>58</u> |
| Additional Electives | <u>61</u> |
| Early College Credit | <u>62</u> |
| Maranacook Alternative Program | <u>63</u> |
| Special Education | <u>64</u> |
| Capital Area Technical Center | <u>65</u> |

PRINCIPAL'S MESSAGE

Dear Maranacook Families,

This publication outlines the courses we will offer for the 2024-2025 school year and the required standards for graduation. Please read this document carefully so that you can make informed decisions for next year and beyond.

COURSE OFFERINGS. Each year the guidance department, school administration and department leaders review our course offerings in order to best serve student needs and interests. We are proud of the offerings we have added over the past few years including over 100 credits of dual enrollment, a cutting edge robotics course and challenging fine arts courses as well as numerous academic and behavior supports. Depending on scheduling and enrollment, please keep in mind it is possible not all the courses listed will be offered.

GRADUATION REQUIREMENTS. Please make sure that you are planning your progress toward graduation. To ensure that students have a well-rounded education and to meet state requirements, we have a range of graduation requirements. These are outlined in the “Academic Requirements” section. These requirements include course credits and demonstration of achievement of the Maine Learning Results.

Our Guidance Department is here to support you with planning your progress through high school. If you have any questions, please contact your School Counselor for clarification.

Kim Ray – School Counselor (A-K)
Sara Chisholm - School Counselor (L-Z)
Lindsay Henderson – Guidance Administrative Assistant

MAKE IT COUNT. We will do anything we can to support you while you're at Maranacook to help you reach your goals, but remember at the end of the day the person most responsible for your success is you. You need to show up at school each day with a positive attitude, ready to work your hardest. Hard work will take you anywhere you want to go in life. Please don't sell yourself short by missing school or not giving school your best effort. You can do this! We offer an extraordinary range of programs and resources here at MCHS. Our hope is that every student will find a place where they feel challenged and supported.

Sincerely,

Michele LaForge

DIRECTORY

Maranacook Community High School
2250 Millard Harrison Drive
Readfield, ME 04355

Telephone: 685-4923
Fax: 685-9597

| | | |
|---|-------------------|-----------|
| Principal | Michele LaForge | Ext. 1022 |
| Assistant Principal | Cal Dorman | Ex. 1040 |
| Student Services Director | Brant Remington | Ext. 1045 |
| School Counselor (Last Names A-K) | Kimberly Ray | Ext. 1070 |
| School Counselor (Last Names L-Z) | Sara Chisholm | Ext. 1048 |
| Guidance Administrative Assistant | Lindsay Henderson | Ext. 1025 |

MCHS CORE VALUES AND BELIEFS STATEMENT

The purpose of Maranacook Community High School is to create an environment where every individual can flourish academically and socially. Through respect, knowledge, and responsibility, the school community promotes character building, 21st century skill development, and personal fulfillment.

Student Expectations for Learning:

- Students will be responsible, trustworthy, and honest citizens and be effective, fair, ethical, and skilled collaborators.
- Students will be clear and effective communicators.
- Students will be creative and innovative learners.
- Students will be active, engaged, and motivated learners.
- Students will be rational, explorative, and creative problem solvers.

CURRICULUM AND GRADUATION REQUIREMENTS

Policy: IKF

REGIONAL SCHOOL UNIT NO. 38 GRADUATION REQUIREMENTS

Before entering high school, students need to know the standards for receiving a high school diploma in order to plan an appropriate educational program to meet that goal.

RSU #38 is implementing a standards-based system of teaching and learning. To be awarded a high school diploma from Maranacook Community High School, students graduating in the Class of 2021 and beyond will demonstrate competency in content areas to be ready to enter a post-secondary educational program or a career as a clear and effective communicator, a self-directed and life-long learner, a creative and practical problem solver, a responsible and involved citizen, and an informed and integrative thinker, by earning credits as defined in this document.

Students graduating in the Classes of 2017-2020 must meet the credit and other graduation requirements as specified in the previous RSU #38 Graduation Requirements Policy dated March 3, 2005. (Attachment A)

The Superintendent, through the high school principal or other designee, shall be responsible for providing accurate information concerning graduation requirements to incoming students and their parents prior to the start of their ninth grade school year. A copy of this policy will be disseminated to all incoming ninth grade students at the time of course selection. This policy will also be included in every edition of the high school student handbook.

I. DIPLOMA REQUIREMENTS FOR STUDENTS GRADUATING IN THE CLASS OF 2021 AND BEYOND

The Maranacook Community High School administration, faculty, and staff will develop and apply a set of graduation standards and performance indicators that align with the content-area standards of the Maine Learning Results.

The student must successfully complete a total of twenty-four (24) credits. They are:

1. English/Language Arts – 4 credits, or the equivalent in standards achievement;
2. Mathematics – 3 credits, or the equivalent in standards achievement;
3. Social studies – 3 credits, or the equivalent in standards achievement;
4. Science – 3 credits, or the equivalent in standards achievement;
5. Physical education – 1.5 credits, or the equivalent in standards achievement;
6. Fine arts – 1 credit, or the equivalent in standards achievement;
7. Health – .5 credit, or the equivalent in standards achievement;
8. Financial Literacy - .5 credit, or the equivalent in standards achievement;
9. Technology - .5 credit, or the equivalent in standards achievement; and
10. Electives – 7 credits

Total Credits: 24

II. MULTIPLE PATHWAYS FOR EDUCATIONAL EXPERIENCES

Students have the opportunity to choose from multiple pathways for educational opportunities and/or credits in order to gain and demonstrate competency in the required Maine Learning Results. In addition to taking courses offered by Maranacook Community High School, a student may earn credits through non-traditional pathways. Examples of non-traditional classes include, but are not limited to:

- Early college/dual enrollment courses
- Career and technical education programming
- Online/virtual learning
- Apprenticeships, internships and/or field work
- Community Service
- Exchange programs
- Independent study
- Alternative education/“At Risk” programming
- Adult education

Each pathway must provide a quality learning experience comparable in rigor to the school unit’s own educational experience (course) offerings. If a student wishes to use one of these pathways, they must gain approval from the guidance department, content area learning leader, and principal.

III. STUDENTS RECEIVING SPECIAL EDUCATION SERVICES

As specified by goals and objectives of their Individual Education Plan, students must meet the standards of the Maine Learning Results and students must satisfy graduation requirements in order to be awarded diplomas.

IV. ADDITIONAL CONSIDERATIONS APPLICABLE TO THE AWARDING OF STANDARDS-BASED DIPLOMAS

- A. Transfer Students: For students who transfer to Maranacook Community High School from another state or from an educational program that is not required to meet the content standards of the system of Learning Results, the Maranacook Community High School principal shall determine the value of the student’s prior educational experience towards meeting graduation requirements.
- B. Home-schooled Students: For previously home-schooled students wishing to receive a diploma from Maranacook Community High School, the Maranacook Community High School Principal shall determine the value of the student’s prior educational experience toward meeting graduation credit requirements. A home-schooled student must be a full time student at Maranacook Community High School for their senior year.
- C. Middle School Students: Middle school students who earn credit at Maranacook Community High School will be awarded content area credit towards graduation requirements.
- D. Early Awarding of Diplomas: A student who has met the State’s and the Board’s diploma requirements in fewer than four years of high school may be awarded a diploma.
- E. Substitutions/exceptions: Any substitution or exception to the local course requirements for graduation will require the approval of the Principal.
- F. Extended Study: Students are eligible for extended years of study to complete the requirements of a diploma if they have not reached the age of 20 at the start of the school year. Students eligible for extended years of study may be referred to adult education or other resources suitable to young learners. Extended study for students with disabilities shall be specified in the student’s Individualized Education Plan.
- G. Participation in Graduation Ceremony: A student must complete all School Board requirements for a high school diploma in order to participate in graduation exercises.

Legal Reference: 20-A MRSA § 4502(8), 4722, 6209 Ch. 127 § 7 (Me. Dept. of Ed. Rule)

Cross Reference: IHCD – Post-Secondary Enrollment Options

Adopted: 03/03/05 Adopted by RSU #38 Board of Directors: 04/27/09 Revised: 06/07/17

GUIDANCE SERVICES

The school counselors provide counseling programs in three domains: academic achievement, career planning, and personal/social development. Our services help students resolve emotional, social, or behavioral problems and help them develop a clearer focus or sense of direction. An effective counseling program is important to our school climate and a crucial element in improving student achievement and well-being. Above all, school counselors are student advocates who consult and collaborate with teachers, administrators, and families to help students be successful. The Guidance office is available to assist students in making course selections and career and post-secondary plans. Students and parents are encouraged to make an appointment to discuss any concerns with one of the school counselors.

COURSE SELECTION INFORMATION

The academic program at Maranacook Community School includes a wide variety of courses. The courses students take in high school affect their options when they graduate. For this reason, we promote a four-year perspective on course selection for students and strongly encourage parental involvement. Parents and students should work with advisors and the guidance office to plan a four-year sequence of courses. We encourage parents and students to think about the recommended courses for various post-secondary opportunities.

Four Year Colleges – Most four year colleges require the following courses for admission, as well as a placement test to determine college readiness in writing, reading and math:

A minimum of:

English Four years of College Prep, Honors or Advanced Placement

Mathematics Four years of College Prep, Honors or Advanced Placement

Science Three years of College Prep or Honors

History Three years of College Prep, Honors or Advanced Placement

World Language Two to four years of a World Language in the same concentration

Two Year Community Colleges and/or Certificate Programs – Carefully check admission requirements for the program in which you are interested. Students may be asked to take additional tests as part of the admission process.

A minimum of:

English Four years of College Prep

Mathematics Three years of College Prep or Applied

Science Three years of College Prep or Applied

Employment – Students must complete all requirements for a Maranacook Community High School diploma to improve their chances of gainful employment.

- It is strongly recommended that students selecting this path attend the Capital Area Technical Center (CATC) during their junior and/or senior year. The CATC experience will help students to develop interests, aptitudes and skills that will enable them to more effectively compete in the workforce.

ACADEMIC PREPARATION CHART

| Subject | High School Diploma | Technical/ Vocational/College Preparation | Four Year College Preparation | Selective College Preparation |
|--------------------|-----------------------------|---|--|---------------------------------------|
| English | 4 credits | 4 credits | 4 credits | 4 credits Honors/AP |
| Math | 3 credits | 3 credits | 3+ credits | 4 credits Honors/AP |
| Science | 3 credits | 3 credits | 3+ credits | 4 credits Honors/AP |
| History | 3 credits | 3 credits | 3 credits | 4 credits Honors/AP |
| Language | Recommended Not Required | Recommended Not Required | 2 credits Minimum Same Language | 4 credits Minimum Same Language |
| Fine Arts | 1 credit | | | |
| Physical Education | 1.5 credits | | | |
| Technology | .5 Credits | | | |
| Financial Literacy | .5 credits | | | |
| Health | .5 credits | | | |
| Electives | 7 credits | Appropriate to Interest | Appropriate to Interest | Appropriate to Interest |

MCHS COURSE PLACEMENT RECOMMENDATIONS FOR 9TH GRADE

ELA Recommendations

| | NWEA (Reading) | HOW (Engagement, Perseverance, Preparedness) |
|------------------|----------------|--|
| English 9 Honors | 75% and above | 3-4 in each area |
| English 9 CP | up to 74% | |

Social Studies Recommendations

| | NWEA (Reading) | HOW (Engagement, Perseverance, Preparedness) |
|---------------|----------------|--|
| Global Honors | 75% and above | 3-4 in each area |
| Global CP | up to 74% | |

Math Recommendations

| | NWEA (Math) | HOW (Engagement, Perseverance, Preparedness) | Other |
|--|---------------|--|--|
| Geometry Honors | N/A | 3-4 in each area | Successfully completes HS Algebra 1 |
| Geometry | N/A | 3-4 in each area | Successfully completes HS Algebra 1 |
| Honors Algebra 1 | 75% and above | 3-4 in each area | Successfully completes 8th grade algebra standards |
| HS Algebra 1 | 36%- 74% | | Successfully completes 8th grade algebra standards |
| HS Algebra 1 Part 1 <i>*Needs two years to complete Algebra 1</i> | up to 35% | | |

Science Recommendations

| | NWEA (Reading) | NWEA (Math) | HOW (Engagement, Perseverance, Preparedness) |
|--------------------------|----------------|---------------|--|
| Physical Science Honors | 75% and above | 75% and above | 3-4 in each area |
| Physical Science CP | 36-74% | 36-74% | |
| Physical Science Applied | Up to 35% | Up to 35% | |

HONORS EXPECTATION

Honors:

Honors classes often offer the same curriculum as regular classes, but are tailored for students who wish to have that challenge. They cover additional topics, or some topics in greater depth.

Students who are successful at the honors level usually have the following profile:

- Are strong readers that are able to synthesize and analyze the material
- Are able to assimilate vocabulary
- Are able to think critically at an abstract level
- Are strong independent learners who are willing to take ownership of their learning
- Are skilled with time management and organizational strategies
- Are able to cover large amounts of material at a fast pace
- Are motivated to achieve academically at the highest level

DUAL ENROLLMENT

Maranacook Community High School is proud to offer Dual Enrollment opportunities for students to earn college credit through high school courses. Dual Enrollment classes are designated within the program of studies with the emblem of the college awarding the credits. At the beginning of each semester, students and parents must complete the application required by the college to earn college credit. **Being in the course does not automatically ensure credit.**

Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

REPORT CARDS AND PROGRESS REPORTS

A report card is mailed home each semester. A progress report is mailed home at the halfway point of each semester. The district uses PowerSchool as its electronic grading system. Grades can be accessed by staff, students and parents on PowerSchool throughout the school year. Please contact the front office for assistance with passwords and logins. Parents are encouraged to contact teachers with any questions or concerns about grades or grading.

DROPPING A CLASS

Each student is required to carry a minimum of 6 courses or the equivalent each semester. Once a course has started, the student is expected to complete it. However, a limited add/drop period of two weeks is held at the beginning of each semester. To add or drop a course after the add/drop period, the student must meet with the school counselor to review the change.. ***Courses may only be dropped within the first two weeks of each semester.*** Exceptions may be requested in special circumstances through the school counselor, and approval may ultimately be granted by an administrator.

ENGLISH LANGUAGE ARTS

| COURSE NAME | LEVEL | GRADE | LENGTH | PREREQUISITE |
|---|------------|-------|---------------|------------------------|
| English 9 | CP, Honors | 9 | Year | |
| English 10 | CP, Honors | 10 | Year | English 9 |
| English 11 | CP, Honors | 11 | Year | English 10 |
| English 12 | CP, Honors | 12 | Year | English 11 |
| Language & Composition AP | AP, DE | 11 | Year | |
| Literature & Composition AP | AP, DE | 12 | Year | |
| Creative Writing | | 10-12 | Semester | |
| Literature in Sports (Offered every other year) | | 9-12 | Semester | |
| Monsters and the Undead (Offered every other year) | | 9-12 | Semester | |
| Public Speaking | DE | 10-12 | Semester | |
| Writing Center Coach | | 10-12 | Year/Semester | Application/Acceptance |

ENGLISH LANGUAGE ARTS

College Prep courses help students master the language and composition skills needed to write clearly and effectively. In addition, students study literature and become familiar with various literary genres. As in all English courses, students work to improve their reading, writing, speaking/listening and critical thinking skills.

Honors courses are for students who choose to work at an accelerated pace and pursue in-depth study. Students in these courses read more difficult materials, apply more abstract concepts and work at a faster pace. Prior summer reading and writing may be required for entering these classes. At this level, students are expected to read independently at home.

Course Name: English 9
Level: College Prep, Honors

Grade: 9
Credit: 1 English

Description: This course reinforces and strengthens students' language, composition, and research skills and sets a foundation of daily reading and writing practice. It is also a survey of various literary types such as novels, short stories, and drama. In this class, we explore diverse cultures and mature issues through modern day, young adult literature. We will learn to craft stronger argumentative essays adhering to correct MLA formatting.

Course Name: English 10
Level: College Prep, Honors
Prerequisite: English 9

Grade: 10
Credit: 1 English

Description: This course emphasizes continuing development of oral language and composition skills. Included within the study are the identification of literary themes and forms, use of effective reading strategies, and development of speaking/listening skills. Students write for varied audiences and purposes and work to apply effective ideas, voice, word choice, fluency, organization, and conventions in their writing. Reading selections for this level include fiction and informational texts.

Course Name: English 11
Level: College Prep, Honors
Prerequisite: English 10

Grade: 11
Credit: 1 English

Description: This course covers both fiction and nonfiction pieces in order to study important themes in American literature. Writing assignments will include analytical essays and the personal narrative. Selections include the study of lesser known writers as well as major figures. Reading selections for this level include drama, fiction, and information texts.

ENGLISH LANGUAGE ARTS

Course Name: English 12
Level: College Prep, Honors
Prerequisite: English 11

Grade: 12
Credit: 1 English

Description: This course explores a wide array of classic and contemporary literature while developing career and college-readiness reading, writing, and critical thinking skills. Students will analyze and assess fiction and non-fiction, and increase their comprehension and understanding of complex texts. Students will also work to further their writing skills through essays, argumentation, journals, reading responses, and a variety of formal and informal writings.

Course Name: Language and Composition AP
Prerequisite: Permission of Instructor

Grade: 11
Credit: 1 English



TC EH111, 3 credits

Description: Students in this introductory college-level course read and carefully analyze a broad and challenging range of nonfiction prose selections, deepening their awareness of rhetoric and how language works. Through close reading and frequent writing, students develop their ability to work with language and text with a greater awareness of purpose and strategy, while strengthening their own composing abilities. Course readings feature expository, analytical, personal, and argumentative texts from a variety of authors and historical contexts. Students examine and work with essays, letters, speeches, images, and imaginative literature. Students prepare for the AP® English Language and Composition Exam and may be granted advanced placement, college credit, or both as a result of satisfactory performance. **Extensive summer reading and writing are required.** Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

Course Name: Literature and Composition AP
Prerequisite: Permission of Instructor

Grade: 12
Credit: 1 English



TC EH221, 3 credits

Description: The AP English Literature and Composition course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students will deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students will consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. The course will include intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. Writing is an integral part of the course, and AP Literature Examination is weighted toward student writing about literature. Writing assignments will focus on the critical analysis of literature including expository, analytical, and argumentative essays. Students prepare for the AP English Literature and Composition Exam and may be granted advanced placement, college credit, or both for satisfactory performance. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

ENGLISH ELECTIVES

Course Name: Creative Writing
Prerequisite: N/A

Grades: 10-12
Credit: 0.5 Elective

Description: Students in this course will experiment with creative genres - short stories, poetry, novels - as a means of developing different imaginative approaches to writing and self-assessment. Self-selected and assigned readings will help students develop creative writing and thinking skills to help them become advanced writers. The emphasis will be on generating original ideas and material, developing basic and increasingly advanced strategies necessary to become a creative, original, and imaginative writer. Students will set independent goals for writing, editing, and publishing (online and offline).

Course Name: Literature In Sports
Prerequisite: N/A

Grades: 9-12
Credit: 0.5 Elective

Description: This is a semester course. Students will read and analyze various short stories, novels and articles. Themes studied may include, but are not limited to leadership, trends, definitions of success and failure, heroes, coaching ethics, etc. Those enrolling in this class should have an interest in both athletics and reading/writing. **Offered every other year - will be offered in the 2025-2026 school year.**

Course Name: Monsters and the Undead
Prerequisite: N/A

Grades: 9-12
Credit: 0.5 Elective

Description: Monsters and zombies are not just scary demons, beasts, and hordes of decaying flesh coming to get you. They also are symbols of our deepest cultural and societal fears. In this course, we will use a wide range of mediums and genres including literature, film, television, graphic novels, and video games. During this course, students will be creating their own creative pieces in the genre. **Offered every other year - will be offered for the 2024-2025 school year.**

Course Name: Public Speaking
Prerequisite: N/A

Grades: 10-12
Credit: 0.5 Elective



TC CO245, 3 credits

Description: This year-long course is designed to help the student develop the ability to prepare and deliver effective speeches and presentations. The course covers both the knowledge required to plan and organize a speech and the interpersonal delivery techniques necessary to overcome nervousness and achieve maximum impact. Informative, persuasive, and commemorative or entertaining speeches are given. Students refine their writing and editing skills by composing, organizing, and proofing documents for a variety of academic and professional purposes. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

ENGLISH ELECTIVES

Course Name: Writing Center Coach

Prerequisite: Teacher permission/application

Grades: 10-12

Credit: 0.5/1 Elective

Description: The Maranacook Writing Center serves both students and staff in order to further a culture of writing in our school and community. We promote writing to learn, writing across the curriculum, and preparing students for writing and learning throughout their academic careers and beyond. We support writers through a writer centered, process oriented approach, centered around talking to writers about writing.

As part of this course, students work as coaches in the Maranacook Writing Center. Coaches will receive training in how to conference with writers, address common writing issues, and build our writing community. Students should expect to participate in group meetings and trainings as well as work at designated times in the writing center.

Receiving credit is contingent on working in the writing center for the required number of hours and attending training. Classwork is done asynchronously through Google Classroom.

MATHEMATICS

| COURSE NAME | LEVEL | GRADE | LENGTH | PREREQUISITE |
|--|------------|-------|----------|---|
| HS Algebra 1 Part 1 | | 9-12 | Year | |
| HS Algebra 1 Part 2 | | 10-12 | Year | HS Algebra 1 Part 1 |
| HS Algebra 1 | | 9-12 | Year | Mastery of 8 th grade math standards |
| Algebra 1 Honors | Honors | 9 | Year | Mastery of 8th grade standards |
| Geometry CP | CP | 9-12 | Year | Algebra 1 |
| Geometry Honors | Honors | 9-10 | Year | Algebra 1 and permission of Math Dept. |
| Algebra 2 CP | CP | 11-12 | Year | Geometry |
| Algebra 2 Honors | Honors | 10-12 | Year | Permission of Math Dept/ Algebra I |
| College Algebra | DE | 11-12 | Year | Algebra 2 |
| Pre-Calculus Honors/ College Math | Honors, DE | 10-12 | Year | Algebra 2 Honors/Permission of Math Department |
| Intro to Calculus Honors/ Calculus I | Honors, DE | 11-12 | Year | Precalculus or College Algebra |
| Calculus AP AB/ Calculus I&II | AP | 11-12 | Year | Precalculus |
| Statistical Inference & Decision Making | DE | 12 | Year | Algebra 2 |
| Practical Math | | 11-12 | Year | |
| Computer Science Discoveries | | 9-12 | Year | |
| Computer Science A AP | AP | 10-12 | Year | |
| Intro to Programming | | 9-12 | Semester | |
| Problem Solving | | 9-12 | Year | |

MATHEMATICS

Course Name: HS Algebra 1 Part 1

Prerequisite: Mastery of 8th grade math standards

Grades: 9-12

Credit: 1 Math

Description: This course builds upon 8th grade Common Core Standards for Algebra and is the first year of a two-part Algebra 1 program. It is designed for the student who is in the lower quartile of standardized scores and requires a small-class learning environment. Emphasis will be on interpreting structure of expressions, performing arithmetic operations on polynomials, creating equations that describe numbers or relationships, solving equations as a process of reasoning and explaining the reasoning, solving equations and inequalities in one variable, representing and solving equations and inequalities graphically, understanding the concept of a function and use function notation, interpreting functions that arise in application in terms of the context, and interpret linear and exponential models and exploring descriptive statistics.

Course Name: HS Algebra 1 Part 2

Prerequisite: HS Algebra 1 Part 1

Grades: 10-12

Credit: 1 Math

Description: This course is the second year of a two-part Algebra 1 program. It is designed for the student who is in the lower quartile of standardized scores and requires a small-class learning environment. Emphasis will be on interpreting structure of expressions, performing arithmetic operations on polynomials, creating equations that describe numbers or relationships, solving equations as a process of reasoning and explaining the reasoning, solving equations and inequalities in one variable, representing and solving equations and inequalities graphically, understanding the concept of a function and use function notation, interpreting functions that arise in application in terms of the context, and interpret linear and exponential models and exploring descriptive statistics.

Course Name: HS Algebra 1

Prerequisite: Mastery of 8th grade math standards

Grades: 9-12

Credit: 1 Math

Description: This course builds upon the 8th grade Common Core Standards for Algebra. The units will deepen and extend understanding of linear, quadratic and exponential relationships. Emphasis will be on interpreting structure of expressions, performing arithmetic operations on polynomials, creating equations that describe numbers or relationships, solving equations as a process of reasoning and explaining the reasoning, solving equations and inequalities in one variable, representing and solving equations and inequalities graphically, understanding the concept of a function and use function notation, interpreting functions that arise in application in terms of the context, and interpret linear and exponential models. For honors these topics will be covered in greater depth than Algebra 1 CP.

MATHEMATICS

Course Name: Algebra 1 Honors

Grade: 9

Prerequisite: Mastery of 8th grade math standards

Credit: 1 Math

Description: This course builds upon the 8th grade Common Core Standards for Algebra. The units will deepen and extend understanding of linear, quadratic and exponential relationships. Emphasis will be on interpreting structure of expressions, performing arithmetic operations on polynomials, creating equations that describe numbers or relationships, solving equations as a process of reasoning and explaining the reasoning, solving equations and inequalities in one variable, representing and solving equations and inequalities graphically, understanding the concept of a function and use function notation, interpreting functions that arise in application in terms of the context, interpret linear and exponential models and exploring descriptive statistics. Topics will be covered in greater depth and at a faster pace than HS Algebra 1.

Course Name: Geometry CP

Grades: 9-12

Prerequisite: Algebra 1

Credit: 1 Math

Description: The class will prepare students to use mathematics and logical thinking effectively in today's world. The units promote independent thinking and learning. Topics covered include using the rectangular coordinate system, rigid motions and congruence, proof, similarity and trigonometry, circles and volume and using statistics to make informed decisions. For honors topics will be covered in greater depth than Geometry CP.

Course Name: Geometry Honors

Grades: 9-10

Prerequisite: Algebra 1 and permission of Math Dept.

Credit: 1 Math

Description: The class will prepare students to use mathematics and logical thinking effectively in today's world. The units promote independent thinking and learning. Topics covered include using the rectangular coordinate system, rigid motions and congruence, proof, similarity and trigonometry, circles and volume and using statistics to make informed decisions. Topics will be covered in greater depth and at a faster pace than Geometry CP.

Course Name: Algebra 2 CP

Grades: 11-12

Prerequisite: Geometry

Credit: 1 Math

Description: The principal goal of this course is to continue the development of analytical thinking and to apply that knowledge to practical problems. This course provides the background needed to continue mathematical study College Algebra or Pre-Calculus. Topics covered include composing and decomposing functions, exploring and analyzing patterns, characteristics of polynomial functions, relating factors and zeros, rational functions, radical, exponential and logarithmic functions, trigonometric relationships, interpreting data in normal distributions. For honors topics will be covered in greater depth than Algebra 2 CP.

MATHEMATICS

Course Name: Algebra 2 Honors

Grades: 10-12

Prerequisite: Permission of Math Dept / Algebra 1

Credit: 1 Math

Description: The principal goal of this rigorous course is to continue the development of analytical thinking and to apply that knowledge to practical problems. This course provides the background needed to continue mathematical study in PreCalculus and Calculus. Topics covered include composing and decomposing functions, exploring and analyzing patterns, characteristics of polynomial functions, relating factors and zeros, rational functions, radical, exponential and logarithmic functions, trigonometric relationships, interpreting data in normal distributions. Topics will be covered in greater depth and at a faster pace than Algebra 2 CP.

Course Name: College Algebra

Grades: 11-12

Prerequisite: Algebra 2

Credit: 1 Math

Description: This course promotes the development of critical thinking and problem solving skills. To do this, it uses a rigorous presentation of mathematical concepts. Topics will include advanced algebra, functions, graphs, polynomials, zeros of polynomials, rational functions, exponential & logarithmic functions, trigonometric functions, & application of trigonometry.

Course Name: Pre-Calculus Honors/College Math

Grades: 10-12

Prerequisite: Honors Algebra 2/Permission of Math Department

Credit: 1 Math

Description: This class continues the sequence of Honors math courses. It aims to prepare students for calculus and college mathematics. Topics are covered in greater depth than in College Algebra and there is a greater emphasis on problem solving. Topics will include advanced algebra, functions, graphs, polynomials, zeros of polynomials, rational functions, exponential and logarithmic function, trigonometric functions, trig identification and graphs, application of trig, and systems of equations.

Course Name: Intro to Calculus Honors/Calculus I

Grades: 11-12

Prerequisite: Precalculus or College Algebra

Credit: 1 Math

Description: Introduction to Calculus is an Honors mathematics course designed to introduce students to the problem solving techniques needed for use in Engineering, Economics, and Physics. This course provides a basic understanding of Calculus so that the student will be prepared for an entry-level college Calculus course. This course covers a basic review of Precalculus along with advanced algebra topics, functions and limits, the derivative and its applications.

MATHEMATICS

Course Name: Calculus AP AB /Calculus I & II

Grades: 11-12

Prerequisite: Precalculus



TC MS231&232, 6 credits

Credit: 1 Math

Description: This is a full year course in elementary functions and introductory calculus; it places primary emphasis on an intuitive understanding of the concepts of differential and integral calculus and on experience with its basic techniques and applications. It is comparable in context and emphasis to a first course in calculus for scientifically oriented freshmen in many colleges and universities. It is expected that all students enrolled in this course will take the AP exam in May. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

Course Name: Statistical Inference and Decision Making

Grade: 12

Prerequisite: Algebra 2

Credit: 1 Math



TC MS301, 3 credits

Description: This is a full year course designed to cover an introduction to statistical concepts. Statistics is a branch of mathematics that deals with the collection, organization, analysis and interpretation of information usually referred to as data. The aim of this course is to give students not only an understanding of these concepts, but also useful skills for working with data. Through student generated experiments and other projects, students will collect data and be able to interpret results. The TI-84 graphing calculator will be used extensively. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

Course Name: Practical Math

Grades: 11-12

Prerequisite: N/A

Credit: 1 Math

Description: This course is designed to prepare students with the fundamental knowledge they need to chart a successful and prudent course as a consumer. It is intended to provide the knowledge needed to understand options and make reasonable decisions, and provide numerous opportunities to experience how to apply that knowledge for possible future work and study in the trades and other vocations.

MATHEMATICS ELECTIVES

Course Name: Computer Science Discoveries
Prerequisite: N/A

Grades: 9-12
Credit: 1 Elective

Description: We live in a world in which most of us carry an incredibly powerful computer with us at all times. Sure, you can use your phone or computer to search the web and play games, but do you know how to use these devices to create websites or games for other people to experience? If you've ever wondered how it is that smartphones and computers do what they do or wanted to build the games and apps that other people use, then Code.org's CS Discoveries might be the perfect course for you. CS Discoveries is an introductory course aimed at helping early high school students explore and understand the basics of computer science. Areas of study for this pilot course will include problem-solving, web development, interactive games and animations, the design process, data and society, and physical computing.

Course Name: Computer Science A AP
Prerequisite: N/A

Grade: 10-12
Credit: 1 Elective

Description: Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language.

Course Name: Intro to Programming
Prerequisite: N/A

Grade: 9-12
Credit: 0.5 Elective

Description: This course will provide an introduction to programming using the Python programming language. Students will use tools to write and test their own programs. The topics covered in this course include: data types, functions, modules, selection, iteration, algorithms, turtle graphics, and debugging.

Course Name: Problem Solving
Prerequisite: N/A

Grades: 9-12
Credit: 1 Elective

Description: Problem Solving is a class that runs in conjunction with the Math Team. Students will learn about, and practice how to solve, problems from a plethora of categories in the high school curriculum. In addition to helping students prepare for the math team meets, the topics learned in this course will help students prepare for: standardized tests (such as the SAT), math they will encounter in college, learning how to go about solving problems. The tests for the class will be the individual rounds at each Math Meet, which happen approximately once per month on Wednesdays. Students have the choice to either take the test by going to the meet or by taking the test during a time agreed upon by the teacher and the student.

Topics covered in this course include: Arithmetic with "*" operations, Inequalities and Absolute Values, Matrices, Determinants, and Systems of Equations, Number Theory, Geometric Similarities, Arithmetic with Ratio and Proportion, Series and Sequences, Counting Principles and Binomial Theorem, Polynomials, Areas and Volumes, Probability, Exponents and Radicals, Lines, Angles, and Polygons, Complex Numbers, Arithmetic with Percent, Arithmetic with Literal Equations, Logs and Log Equations, Linear Coordinate Geometry, Functions, Trigonometric Mechanics, Algebraic Fractions with Factoring, Trigonometric Equations and Identities, Circles and Spheres, Conics, Arithmetic with Statistics.

SCIENCE

| COURSE NAME | LEVEL | GRADE | LENGTH | PREREQUISITE |
|------------------|---------------------|-------|----------|--|
| Physical Science | Applied, CP, Honors | 9 | Year | |
| Biology | Applied, CP, Honors | 10 | Year | |
| Physics | Applied, CP | 11-12 | Year | |
| Physics 1 AP | AP | 11-12 | Year | Honors Algebra 2 or Permission of Instructor |
| Chemistry | Applied, CP | 11-12 | Year | |
| Chemistry Honors | Honors, DE | 11-12 | Year | Recommendation of Instructor |
| Biology AP | AP, DE | 11-12 | Year | Recommendation of Instructor |
| Robotics | | 9-12 | Semester | |

SCIENCE

The expected path of students to fulfill the 3 credit science requirements is: successful completion of physical science in 9th grade, biology in 10th grade, and either chemistry or physics in 11th grade. The 3 credits must be earned through a combination of these 4 core courses- physical science, biology, chemistry, and physics.

Course Name: Physical Science
Level: Applied, College Prep, Honors
Prerequisite: N/A

Grade: 9
Credit: 1 Science

Description: Physical Science is designed to provide the foundation for further rigorous study in Physics, Chemistry and Earth Science. Throughout this course students will learn about the principles and practices of Physics, Chemistry, and Earth Science. The course focuses on energy, motion, change, cycles, the development of ideas and how these are modeled in physical sciences. Using an inquiry based, problem solving model, the course supports and encourages the development of a scientifically literate student.

Course Name: Biology
Level: Applied, College Prep, Honors
Prerequisite: N/A

Grade: 10
Credit: 1 Science

Description: Biology is designed to increase the student's understanding of systems, models, scale, and the concepts of constancy and change. The student will increase their skills in scientific inquiry and technical design. Students will explore how society interacts with science and technology, and how human history impacts the nature of science. This course will cover biodiversity, bioethics, ecosystems, cells, cellular chemistry, heredity, reproduction, and evolution.

Course Name: Physics
Level: Applied, College Prep
Prerequisite: N/A

Grade: 11-12
Credit: 1 Science

Description: Physics exposes students to the applications of systems, models and scale in science and technology. Students plan, conduct and analyze data from experiments and use the data to create and test technological designs to meet specific needs. Students explore the nature of energy, force, and motion, wave phenomena, electricity and magnetism.

SCIENCE

Course Name: Physics 1 AP

Prerequisite: Honors Algebra 2 or Permission of Instructor

Grade: 11-12

Credit: 1 Science

Description: This class is designed to provide students with an insight into the universe we live in. Per College Board directive, topics of exploration include, but are not limited to: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion. Lab work is integral to the understanding of the concepts in this course. As directed by the College Board, students will spend a minimum of 25% of instructional time engaging in laboratory experiences with an emphasis on inquiry-based investigations. Laboratory experiences are focused on designing experiments, gathering data, graphing data, and analyzing patterns. The AP curriculum is designed by the College Board as a course equivalent to an algebra-based college-level physics class. At the end of the course, students may take the AP Physics 1 Exam which will test their knowledge of both the concepts taught in Physics 1 AP and the skills needed to apply that knowledge.

Course Name: Chemistry

Level: Applied, College Prep

Prerequisite: N/A

Grade: 11-12

Credit: 1 Science

Description: This academically challenging course is designed as an introduction to the enterprise of chemistry. Chemistry is very much a part of our society and reaches into almost every facet of life. This course will help students understand the principles of chemistry so that they may feel confident and informed in an ever increasingly scientific and technological world. The central theme of the course is that properties of matter are a consequence of the structure of matter. The student will be introduced to the language of chemistry—descriptive, symbolic and quantitative. Topics include Measuring and Calculating, Matter, Atomic Structure, Chemical Formulas, The Mole, Chemical Reactions, The Periodic Table, Chemical Bonding, The States of Matter, Solutions, Acids and Bases, Oxidation-Reduction and Electrochemistry, and Nuclear Chemistry.

Course Name: Chemistry Honors

Prerequisite: Recommendation of Instructor

Grade: 11-12

Credit: 1 Science



KVCC CHE112, 4 credits

Description: This rigorous course is an introduction to the enterprise of chemistry. This course will help students understand the essential principles and facts of chemistry and its fundamental importance in an ever increasingly scientific and technological world. The central theme of the course is that properties of matter are a consequence of the structure of matter. The student will be introduced to the language of chemistry—descriptive, symbolic and quantitative. Topics include Measuring and Calculating, Matter, Atomic Structure, Chemical Formulas, The Mole, Chemical Reactions, The Periodic Table, Chemical Bonding and Molecular Structure, The States of Matter, Solutions, Chemical Equilibrium, Acids and Bases, Oxidation-Reduction and Electrochemistry, and Nuclear Chemistry. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

SCIENCE ELECTIVES

Course Name: Biology AP

Prerequisite: Biology and/or Recommendation from Instructor

Grade: 11-12

Credit: 1 Science



TC SC215, 3 credits

Description: AP Biology is an intensive course comparable to an introductory biology course taken in college. This course emphasizes the development of understanding concepts rather than an accumulation of facts. The student should understand and appreciate the science of biology as well as appreciate scientific inquiry that develops their problem solving and critical thinking skills. The format for this class will be primarily lecture and labs. There are prerequisites for this course. In order to be successful on the AP exam given in May, proven success in biology and an interest in chemistry is recommended. Junior or senior status is preferred, but sophomores may be considered with special permission. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

Course Name: Robotics

Prerequisite: N/A

Grades: 9-12

Credit: 0.5 Elective

Description: The VEX robotics course is a hands-on STEM curriculum course that is designed to be interactive through a team approach. By familiarizing students with programming, sensors, and automation, they hone critical computational thinking skills. Beyond science and engineering principles, this course encourages creativity, teamwork, leadership, passion, and problem-solving among groups. The class uses the VEX Robotics brand. Students will learn mechanical principles as they use the VEX Robotics kits to build and modify a robot. The VEXcode application uses a familiar block coding environment, which is a user-friendly way to introduce coding basics as students learn to control these robots.

SOCIAL STUDIES

| COURSE NAME | LEVEL | GRADE | LENGTH | PREREQUISITE |
|--|------------|-------|----------|---|
| Global Explorations in History, Geography, and Economics | CP, Honors | 9 | Year | |
| World History | CP, Honors | 10 | Year | Global Explorations in History, Geography, and Economics |
| World History AP | AP | 10 | Year | Global Explorations in History, Geography, and Economics (Honors Recommended) |
| U.S. History | CP | 11 | Year | World History |
| U.S. History AP | AP, DE | 11 | Year | World History (Honors or AP Recommended) |
| Criminal Psychology | CP | 11-12 | Semester | |
| Current Events & Global Issues | CP | 9-12 | Semester | |
| Ethics | DE | 11-12 | Semester | |
| History vs Hollywood | DE | 11-12 | Semester | |
| Holocaust Studies | CP | 10-12 | Semester | |
| Psychology AP | AP, DE | 11-12 | Year | |
| Sociology | CP | 11-12 | Semester | |
| Street Law | CP | 10-12 | Semester | |

SOCIAL STUDIES

The discipline of social studies is important for all students. Social studies moves far beyond facts and dates; social studies classes explore the basic human rights and diversity of cultures in our own and other countries. Through the disciplines of social studies students will gain a better understanding of the present by looking at the past. Major themes of human rights, cultural diversity, and understanding our modern world are relevant to all students. Whether students plan to enter college or the business world after graduation, they will find that these topics are major issues that must be confronted and understood to become a good citizen in their community.

Course Name: Global Explorations in History, Geography, and Economics

Grade: 9

Level: College Prep, Honors

Credit: 1 Social Studies

Prerequisite: N/A

Description: All students entering ninth grade at Maranacook are required to take Global Explorations. This is a course that is designed to expose students to many of the concepts and skills they will be using in Social Studies throughout their time at Maranacook. Students will broaden their understanding of the world by learning about physical and human geography, including world cultures and global economics. The class addresses Learning Results Standards in Research Skills, Civics, Geography, and Economics. Students must pass this course for graduation.

Course Name: World History

Grade: 10

Level: College Prep, Honors

Credit: 1 Social Studies

Prerequisite: Global Explorations in History, Geography, and Economics

Description: The course traces the development of world history from the earliest civilizations to the present. The class begins with a study of the multitude of cultures of past and present starting with the development of early civilizations and the oldest cultures. The course surveys the ideals of democracy and the origins of republican government. It addresses the roots of modern conflict and explores the rise of organized religion and its connection to eastern and western civilization. The course then moves on to examine how imperialism and colonialism have impacted world cultures and the reactions of cultures to this interference. The course investigates the rise of communism as a reaction to Western domination and examination of the current trend toward consumerism in the Eastern world and its impact on the future. Examinations of modernity and the possibilities for the future bring the course to conclusion.

Course Name: World History AP

Grade: 10

Prerequisite: Global Explorations in History, Geography, and Economics (Honors Recommended)

Credit: 1 Social Studies

Description: AP World History is a rigorous academic course that demands maturity and independent and sound work habits from the student. The course traces the development of world history from 8000 B.C.E. to the present, and emphasizes the analytical and writing skills necessary for success in a college-level history course. To this end, the course devotes considerable time to the critical evaluation of primary and secondary sources, analysis of historiography, oral presentations, and short essays. Students enrolled in the course are expected to do summer reading in preparation for the course and take the AP Examination in May. Those who score well may receive college credit. This course fulfills one of the three required credits in Social Studies for graduation.

SOCIAL STUDIES

Course Name: U.S. History CP

Prerequisite: World History

Grade: 11

Credit: 1 Social Studies

Description: U.S. History is a two-semester course that is required for graduation. Students will explore U.S. government and citizenship as well as some of the major events and ideas of the last 250 years. A greater emphasis will be placed on the 20th Century (post-1877). In addition, students will learn about major leaders and current events that shape the world we live in today.

Course Name: U.S. History AP

Prerequisite: World History (AP or Honors Recommended)

Grade: 11

Credit: 1 Social Studies



TC HG221 & HG222, 6 credits

Description: Advanced Placement U.S. History (AP) is designed to provide students the factual knowledge necessary to deal critically with the problems and materials in American History and to prepare students for the AP exam. Students will learn to assess historical materials, their relevance, reliability, and importance and to weigh the evidence presented in historical scholarship. Students should be proficient in note-taking from printed materials, lectures, and discussions. Members of the class will write essay exams, analytical and research papers. They will be able to express themselves clearly and precisely and cite sources. Summer Readings are a requirement of this course. It is expected that all students enrolled in this course will take the AP exam in May. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

SOCIAL STUDIES ELECTIVES

Course Name: Criminal Psychology
Prerequisite: N/A

Grade: 10-12
Credit: 0.5 Elective

Description: Criminal Psychology is a one semester Social Studies Elective. It is the application of psychology to legal issues. This course will provide a foundational understanding of the inter-section of psychology and the law and introduce students to related topics such as the roles and responsibilities of forensic psychologists, forensic psychological assessments, lie detection, evaluation of DNA and physical evidence, jury selection, the insanity defense, criminal profiling, eyewitness and expert testimony, offender treatment, the death penalty and correctional psychology.

By examining case studies, trials, established and emerging laws, and relevant research, students will gain knowledge into psycho-logical aspects of criminal activity and the people who commit those crimes, as well as a basic understanding of the major mental disorders and how they may cause, aggravate or mitigate criminal conduct. This includes investigation of crime of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigate procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes.

Course Name: Current Events & Global Issues
Prerequisite: N/A

Grades: 9-12
Credit: 0.5 Elective

Description: This class is designed to provide students with the opportunity to discuss, understand, and explore local, national, international, political, economic and social issues in a respectful, meaningful, and active way. Throughout the term, students will stay up to date on current issues and trends. Because the subject of this class is “contemporary,” topics will vary considerably depending on the current news cycle.

Students will be challenged to defend their opinions on many different issues. Students will independently research a current world issue or event for the purpose of finding the truth of the issue. Students will present and defend their opinions and findings on their topic.

Topics will include Local, National, and International news relating to political, economic and social issues as they occur.

Ongoing Domestic Issues:

- President and his Administration
- Federal Budget, Deficit and Consumer Debt
- Constitutional Rights
- Education and Health Care Reform
- Immigration Reform
- Crime and Drugs

Ongoing International Issues:

- Human Rights
- Global Climate Change
- Globalization and Free Trade
- Terrorism

SOCIAL STUDIES ELECTIVES

Course Name: Ethics

Prerequisite: N/A

Grades: 11-12

Credit: 0.5 Elective



TC PH224, 3 credits

Description: This course is designed to foster critical thinking and rational decision-making in the discussion of controversial ethical issues and dilemmas. Students will improve their capacity to reason effectively, weigh and use evidence, understand multiple perspectives, and use critical analysis as they address scientific, medical, political and moral issues. Among the topics to be discussed are ethical theory, physician-patient relationships, the concept of Justice, and the Death Penalty. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

Course Name: History vs Hollywood

Prerequisite: N/A

Grades: 11-12

Credit: 0.5 Elective



TC HU237, 3 credits

Description: This is a semester course. This course is designed to study the History and experience of World War II through films. Students will critically analyze a couple of important questions. First of all, how accurately does Hollywood portray the historical events and characters related to the era? What dangers exist for American democracy if many people believe in and understand a history that never happened? Using the films, and primary and secondary sources, students will be asked to analyze the accuracy and impact of Hollywood films about World War II history. Class discussions, group and individual projects will be important parts of this course. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

Course Name: Holocaust Studies

Prerequisite: N/A

Grade: 10-12

Credit: 0.5 Elective

Description: Holocaust Studies is a single-semester course that describes the mass murder of millions of Jews during the Nazi rule in Germany and its impact on the international community. In this course, we will trace the history of Jews living in Europe and the origins of anti-Semitism. We will study the early life of Hitler, his rise to power, and the rise of the Nazi party. The course also describes how the Nazis exterminated the Jews and how Jews resisted. The course will also explore anti-Semitism and genocide today.

SOCIAL STUDIES ELECTIVES

Course Name: Psychology AP

Prerequisite: N/A

Grade: 11-12

Credit: 1 Elective



TC PY111, 3 credits

Description: This is a year-long course in the study of Psychology. The course will follow the AP curriculum from the College Board. There will be preparation for the AP Exam in May as well. Psychology is the study of human behavior. Students will explore the influences of environmental and physical conditions, including heredity, on the motivations and emotions involved in human interaction. This course is designed to be an advanced version of the CP Psychology semester, the AP class includes a higher level of reading and writing that will be in line with an introductory psychology class taken at a University. Students may find it beneficial to take the CP Psychology class before taking this class, but it is not required. The curriculum will go more in depth than the CP class and include more topics. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

Course Name: Sociology

Prerequisite: N/A

Grades: 11-12

Credit: 0.5 Elective

Description: This is a semester course. Sociology is the study of human social life referring to everything related to the interaction of human beings in groups. Students in this course will learn to use “sociologists’ tools,” observation, description, analysis and prediction, to explore how groups of people act, react, and interact in various situations. Class discussions, group and individual projects will be important parts of this course.

Course Name: Street Law

Prerequisite: N/A

Grades: 10-12

Credit: 0.5 Elective

Description: Street Law is a one semester Social Studies Elective that serves as an introductory course to law and legal systems in the United States. Units will include:

- Introduction to Law
- Constitutional Law
- Criminal Law and the Criminal Justice Process
- Civil Law (Torts, Contracts and Family Law)

Like any introductory course, Street Law is a survey. We will touch on broad and specific legal topics to give students a better understanding of law and how it affects them in real life. We will use case studies, individual research, group discussion/debate, guest speakers and mock trials throughout the course in order to reach our goal.

HEALTH AND PHYSICAL EDUCATION

| COURSE NAME | GRADE | LENGTH | PREREQUISITE |
|---|-------|----------|------------------------------------|
| Intro to P.E. | 9 | Semester | |
| Phys Ed 10 | 10 | Semester | Intro to P.E. |
| Competitive Sports | 11-12 | Semester | Phys Ed 10 (with teacher approval) |
| Fitness For Life | 11-12 | Semester | Phys Ed 10 |
| Net Sports | 11-12 | Semester | Phys Ed 10 |
| Physical Education for Varied Abilities | 9-12 | Semester | |
| Sports Training | 11-12 | Semester | Phys Ed 10 |
| Team Sports | 11-12 | Semester | Phys Ed 10 |
| Health | 10 | Semester | |

HEALTH AND PHYSICAL EDUCATION

Students will need to take Intro to P.E and Phys Ed 10 and then will get to pick one elective to take. Students can take as many PE classes as they want after they have met their requirements.

Course Name: Intro to P.E
Prerequisite: N/A

Grades: 9
Credit: 0.5 PE

Description: This is a semester class. This course is designed to provide instruction and opportunity for students to increase motor skill competency, improve social interaction, and participate in a variety of fitness activities over an extended period of time. In this class students will participate in Ultimate Frisbee, Team Sports, Badminton, Pickleball, Gym Games, and Fitness Components.

Course Name: Phys Ed 10
Prerequisite: Intro to P.E.

Grades: 10
Credit: 0.5 PE

Description: This is a semester class. This course is designed to provide instruction and opportunity for students to increase motor skill competency, improve social interaction, and participate in a variety of fitness activities over an extended period of time. Students will be tested on the Fitnessgram and be able to compare their scores from the previous year. At the end of the semester students will also participate in the Presidential Fitness Test. In this class students will play Volleyball, Soccer, Floor Hockey, Wiffleball, Tennis, Gym Games, and get to choose two other sports to play as a group.

Course Name: Competitive Sports
Prerequisite: Phys Ed 10

Grades: 11-12
Credit: 0.5 PE

Description: This is a semester class. The purpose of this class is to offer an advanced level physical education class to students seeking out a competitive environment. This class will expose students to a wide variety of team and individual sports, lifetime and leisure experiences at a more competitive level than traditional physical education. The program is designed to provide all students with opportunities for mental, physical and social growth and development through physical activities. We will have class playoffs in these units as well. Students will participate in Ultimate Frisbee, Floor Hockey, Speedball, Dodging and Fleeing activities, invasion games as well as a mixture of the typical team sports. Students will need teacher approval in order to register for this class.

Course Name: Fitness For Life
Prerequisite: Phys Ed 10

Grades: 11-12
Credit: 0.5 PE

Description: This is a semester class. Students will participate in mostly workouts in the weight room as well as some workouts to improve overall conditioning. After workouts are over students will get some time to participate in games or activities.

HEALTH AND PHYSICAL EDUCATION

Course Name: Net Sports

Grades: 11-12

Prerequisite: Phys Ed 10

Credit: 0.5 PE

Description: This is a semester class. This course is designed to provide instruction and opportunity for students to increase motor skill competency, improve social interaction, and participate in a variety of fitness activities over an extended period of time. Students will compete in Pickleball, Tennis, Badminton, and Volleyball. Students will play other types of games, but the primary focus is on net sports.

Course Name: Physical Education for Varied Abilities

Grades: 9-12

Prerequisite: N/A

Credit: 0.5 PE

Description: This course is designed to provide the learner with the skills and knowledge to be active for a lifetime. Activities for this class are modified as appropriate for individual student's abilities and guidelines from the school. Course activities could include: individual skills (locomotor and manipulative), small group activities, small-sided team games, fine/gross motor development, fitness, dance, team building, bowling, outdoor education and other modified activities.

Course Name: Sports Training

Grades: 11-12

Prerequisite: Phys Ed 10

Credit: 0.5 PE

Description: Students will analyze various methods of training for their specific sports and learn ways to develop and improve upon their individual skills. Students will create individualized fitness plans that will help them meet their training goals and learn how to analyze fitness scores to find ways to improve them based on methods centered around biomechanics and exercise physiology. Students will also be exposed to the culture and business of sports and its participants; including athletes, coaches, officials and spectators. This class will be a mixture of gymnasium activities, fitness center as well as in the classroom.

Course Name: Team Sports

Grades: 11-12

Prerequisite: Phys Ed 10

Credit: 0.5 PE

Description: This is a semester class. This course is designed to provide students with instruction and opportunities to increase their motor skills, improve social interaction, develop appropriate teamwork strategies and participate in a variety of sports with fitness components highly embedded with the lessons. The class will be built around the "team" concept with teams doing skill workouts and training sessions related to each individual team sport. Students will participate in sports including but not limited to Handball, Soccer, Basketball, Volleyball, Football, Wiffle Ball and Floor Hockey.

HEALTH AND PHYSICAL EDUCATION

Course: Health
Prerequisite: N/A

Grade: 10
Credit: 0.5

Description: This is a semester course. Health education covers ten areas: consumer health, community health, environmental health, family life, nutrition, personal health, first aid and safety, substance use and abuse, prevention and control of disease and disorders, growth and development. Students will work on cooperative activities and will contribute a major project to the class.

VISUAL ARTS

| COURSE NAME | LEVEL | GRADE | LENGTH | PREREQUISITE |
|------------------------|--------|-------|---------------|--|
| Intro to Art | | 9-12 | Year | |
| Ceramics | | 10-12 | Semester | Intro to Art is preferred |
| Ceramics II | | 10-12 | Semester | Ceramics I OR Studio Art Honors is required |
| Ceramics III | | 11-12 | Semester | Ceramics II or teacher approval required |
| Digital Photography | DE | 10-12 | Semester | Intro to Art is preferred |
| Drawing I | | 10-12 | Semester | Intro to Art |
| Drawing II | | 11-12 | Semester | Drawing I |
| Fine Metals I | | 10-12 | Semester | Intro to IA or Intro to Art |
| Fine Metals II | | 10-12 | Semester | Fine Metals I |
| Painting | | 11-12 | Year | Intro to Art required/Drawing I and II preferred |
| Studio Art Honors I | Honors | 9-11 | Semester/Year | Grade 9: GT Status Required Grades 10-11: Intro to Art, GT status, OR teacher approval required |
| Studio Art Honors II | Honors | 10-12 | Year | Studio Art Honors I, OR teacher approval required |
| Studio Practice Honors | Honors | 11-12 | Year | Studio Art Honors II, OR teacher approval required |

VISUAL ARTS

Art is a universal language. It provides visual information about individuals, society, and cultures. There are no right or wrong answers in art, only tools, techniques, and opportunities for creative self-expression. The following art courses provide the environment, the materials, and the expertise to challenge your aesthetic senses and allow you to communicate visually.

Course Name: Intro to Art

Grades: 9-12

Prerequisite: N/A

Credit: 1 Fine Art

Description: This is a year long class. This course is a survey of a variety of art-making processes. Students will study elements of art and principles of design through many mediums that include drawing with ink and pencil, painting, collage, printmaking, creation of altered books, basketry, sculptural projects, and tapestry weaving. They will also study the art of world cultures and historically significant artists.

Course Name: Ceramics I

Grades: 10-12

Prerequisite: Intro to Art is preferred

Credit: 0.5 Fine Art

Description: This is a semester course. Students will experience the creative potential of clay. Using the potter's wheel and hand-building techniques, they will explore the sculptural and functional qualities of the medium. Students will be introduced to the use of high-fire clays, decorative use of slips, a variety of glazes, and will learn more about the aesthetics of chawan (tea bowls) that are created and enjoyed throughout Asia.

Course Name: Ceramics II

Grades: 10-12

Prerequisite: Ceramics I or teacher approval required

Credit: 0.5 Fine Art

Description: This is a semester course. Students will experience the creative potential of clay. Using the potter's wheel and hand-building techniques, they will explore the sculptural and functional qualities of the medium. Students will be taught intermediate decorative techniques such as sgraffito and mishima surface decoration. Art historical themes will be introduced to instruct students in the cultural and artistic significance of ceramics throughout history.

Course Name: Ceramics III

Grades: 11-12

Prerequisite: Ceramics II or teacher approval required

Credit: 0.5 Fine Art

Description: This is a semester course. Students will experience the creative potential of clay. Using the potter's wheel and hand-building techniques, they will explore the sculptural and functional qualities of the medium. Students will be taught advanced decorative techniques used together in combinations, such as incising and engobe inlay, faceting, sprigs, and other types of surface decoration. Art historical themes will be introduced to instruct students in the cultural and artistic significance of ceramics throughout history.

VISUAL ARTS

Course Name: Digital Photography
Prerequisite: Intro to Art is preferred

Grades: 10-12
Credit: 0.5 Fine Art



UMA ART109, 3 credits

Description: This is a semester course. In this course, students will learn new skills to achieve the best results with their own digital cameras, while working to explore the art of photography in new ways. Students will learn both rudimentary and advanced levels of digital photo editing to attain new techniques for use in the fine art of digital printing. Digital Photography students will work on projects containing a wide range of subject matter, including portraits, outdoor photography, and photomanipulation. Upon completion of digital photography assignments, students will participate in classroom presentations and critiques. Students will chiefly use the digital application, Acorn, that is available to students through licenses for use on the Macbook Airs. A digital camera/mobile device with a lens specs of 10 MP or higher is required. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

Course Name: Drawing I
Prerequisite: Intro to Art

Grades: 10-12
Credit: 0.5 Fine Art

Description: This is a semester course. In this course, students will explore a variety of drawing techniques and concepts including line and contour drawing with graphite, subtractive charcoal, and contemporary approaches to using ink. Students will receive technical instruction in the creation of effective value studies and scaling their work to align with characteristics of the media that they are exploring. Students will increase competency in visual, technical, and conceptual problem-solving, and will develop communication skills in art-making, art criticism, and appreciation. Art media used include graphite, colored pencil, india ink, charcoal, chalks, Sharpie markers, and collage materials.

Course Name: Drawing II
Prerequisite: Drawing I

Grades: 11-12
Credit: 0.5 Fine Art

Description: This is a semester course. In this course, students will explore a variety of drawing techniques and concepts including perspective drawing, cubist art, street art, collage, portraiture, and a variety of design problem-solving strategies. Students will increase competency in visual, technical, and conceptual problem-solving, and will develop communication skills in art-making, art criticism, and appreciation. Art media used include graphite, colored pencil, india ink, charcoal, chalks, Sharpie markers, and collage materials.

Course Name: Fine Metals I
Prerequisite: Intro to IA or Intro to Art

Grades: 10-12
Credit: 0.5 Fine Art

Description: Students will be introduced to fabrication techniques and design concepts associated with jewelry and small object construction. Through sawing, filing, soldering with a torch and hammering skills we will explore materials such as sterling silver, copper, brass and semi-precious gemstones. Projects will be focused around a design challenge and a technical component which will expand students' understanding of what jewelry and small object design can be while teaching them valuable skills associated with the industry.

VISUAL ARTS

Course Name: Fine Metals II

Grades: 10-12

Prerequisite: Fine Metals I

Credit: 0.5 Fine Art

Description: This course builds on the skills and basic design understanding students developed in Fine Metals I. New techniques and design challenges will be introduced and students will create both jewelry and ornamental small objects out of silver, copper and/or brass. Focus will be placed on design innovation and the growth of one's technical skills.

Course Name: Forging

Grades: 10-12

Prerequisite: Intro to IA or Intro to Art

Credit: 0.5 Fine Art

Description: This course introduces students to traditional blacksmithing techniques that center around forging steel while it's hot on an anvil. Students will make a variety of objects and be shown an assortment of decorative approaches for working with the metal. Emphasis is placed primarily on mastery of techniques, accurate reproduction of the example pieces, craftsmanship, and perseverance however, aesthetics, design development and ergonomics will also be addressed. If you enjoy this class you might also consider taking Fine Metals.

Course Name: Painting

Grades: 11-12

Prerequisite: Intro to Art required/Drawing preferred

Credit: 1 Fine Art

Description: This is a year long class. In this course, students will learn fundamental painting techniques and explore the creative potential of painting and self-expression using water-soluble paints (acrylic and watercolor) on a variety of surfaces (paper, canvas, masonite) and will develop communication skills in art-making, criticism, and appreciation in the process. Students will work on individual and collaborative pieces. Students will study art movements, work of historically significant and contemporary artists, and create reproductions of famous works and several original paintings in a variety of size formats and styles.

Course Name: Studio Art Honors I

Grades: 9

Prerequisite: GT Status in Visual Art or teacher approval required

Credit: 0.5/1 Fine Art

Description: This art course is designed for highly motivated art students who want honors study in specific art media. Students will work on compiling a body of work in 2-3 media of teacher choice and 1 concentration of their choice. Students will capture their planning and artistic development in ongoing sketchbook work. There will be post-secondary education opportunities, an emphasis on focused independent practice, and discussion on trends in contemporary art. Due to the range of media explored, students will have the opportunity to enrich their artistic experiences and bolster their portfolios with work selected to challenge and focus their talents.

VISUAL ARTS

Course Name: Studio Art Honors II

Prerequisite: Studio Art Honors I required

Grades: 10-12

Credit: 1 Fine Art

Description: This art course is designed for highly motivated art students who want honors study in specific art media. Students will study compositional approaches, inventory personal creative choices, and formulate new conceptual approaches in their work as they strive to make meaning in their artwork. A variety of cultural references will be explored as students make art with societal, cultural, and historical significance, while deepening their knowledge of contemporary approaches to making art. This course is recommended for students looking to bolster their portfolios with expertise in choice-based, conceptual art production.

Course Name: Studio Practice Honors

Prerequisite: Honors Studio Art II, teacher approval required

Grades: 11-12

Credit: 1 Fine Art

Description: This art course is designed for highly motivated art students who seek advanced study in a self-directed, apprenticeship format. The apprenticeship will occur outside the regular school day. In order to qualify, students will develop personalized learning plans and design attainable creative strategies for community-based art pursuits during the first 1-2 weeks of the course. The teacher will help support students in their fine craft or fine arts-based planning with units to guide growth and inquiry into techniques and time management. Students will venture out into the community and form a partnership to work in a craft guild or apprenticeship outside of the regular school day. They will be responsible for setting up and keeping appointments, submitting sketches for work that they are creating in their sketchbook, and documenting the ways they are using time, flexibility, and energy to design art for a purpose.

PERFORMING ARTS

| COURSE NAME | LEVEL | GRADE | LENGTH | PREREQUISITE |
|----------------------------|--------|-------|----------|--|
| Chamber Singers | | 9-12 | Year | Permission of Instructor |
| Concert Band | | 9-12 | Year | |
| Concert Chorus | | 9-12 | Year | |
| History of Musical Theater | | 9-12 | Semester | |
| Intro to Modern Music | | 9-12 | Semester | |
| Jazz Band | | 9-12 | Year | Permission of Instructor |
| Modern Music Ensemble | | 9-12 | Semester | Intro to Modern Music or Permission of Instructor |
| Music Theory | DE | 10-12 | Semester | |
| Music Theory AP | AP, DE | 10-12 | Year | Permission of Instructor |

PERFORMING ARTS

The study of music is a valued and integral part of education. Our goal is to enrich our students' lives through music; to increase their knowledge of music and to guide them toward a lifelong understanding and love for music. Music teaches us that not all aspects of life are definable; and that every question does not have one right answer. Every student should experience a feeling of pride and success in some musical endeavor whether (s)he plays an instrument, sings or learns to appreciate different kinds of music.

Course Name: Chamber Singers
Prerequisite: Permission of Instructor

Grades: 9-12
Credit: 0.5 Fine Art

Description: This is a year long course. This is a small, vocally balanced group of singers. Students learn the skills and techniques of singing and staging performances. The variety of music used in this course may include Broadway, Popular, Classical, Folk and Traditional pieces. Public performances are required.

Course Name: Concert Band
Prerequisite: N/A

Grades: 9-12
Credit: 1 Fine Art

Description: This is a performance-based course in which students are involved in solo, ensemble, and full band performances. Students will receive individual, sectional and full band instruction. They will explore a wide variety of musical styles including Jazz, Popular, Classical, Folk and Traditional. Individual progress as well as group participation is emphasized. Scheduled public performances are a required component of this course.

Course Name: Concert Chorus
Prerequisite: N/A

Grades: 9-12
Credit: 1 Fine Art

Description: This is a semester or year long course. This course is open to any student regardless of musical background. Students learn techniques of singing and reading music through the performance of a variety of music that may include popular, classic, folk, rock and traditional pieces. Public performances are required. This class meets on a regular class schedule.

Course Name: History of Musical Theater
Prerequisite: N/A

Grades: 9-12
Credit: 0.5 Fine Art

Description: Bringing together the fantastical musical elements of Opera with the acting of movie and stage. Musical Theater brings fantasies, harsh realities and real life situations to the stage in engaging and exciting ways. Like the History of Rock and Roll, this course is an exploration of American culture through Musical Theater. Students will watch some of the most iconic musicals from American history as we explore cultural, social, and political issues brought to life on the stage. Students will also gain a fundamental understanding of aspects of musical theater including lighting, sound, costume design, set design, and overall performance qualities.

PERFORMING ARTS

Course Name: Intro to Modern Music
Prerequisite: N/A

Grades: 9-12
Credit: 0.5 Fine Art

Description: This is a semester course. *Intro to Modern Music* is a course designed to introduce students to a variety of musical instruments and opportunities, allowing students to explore Acoustic/Electric Guitar, Electric Bass, Piano, Drum Kit and (if desired) vocals. In this course, students will be required to study the fundamentals of Guitar and Piano. After doing so, they will be given a choice to explore the other instruments above, or pursue Guitar or Piano further. Students will learn the basics of Leadsheet Notation, Standard Notation and Tablature, Song Form, Chords, Chord Progressions, Strumming, Rhythm and Recording. **This course requires students to perform in front of others.**

Course Name: Jazz Band
Prerequisite: Permission of Instructor

Grades: 9-12
Credit: 0.5 Fine Art

Description: This is a year long course. This is a course for a select group of students of brass, woodwind and rhythm instruments. They will study and perform different styles of jazz and contemporary music. Scheduled public performances are a required component of this course. This class meets every other morning before school.

Course Name: Modern Music Ensemble
Prerequisite: Intro to Modern Music or Instructor Permission

Grades: 9-12
Credit: 0.5 Fine Art

Description: Modern Music Ensemble is a performance-based course with the goal of performing music in small ensembles or “bands”. Students enrolling in this course will work with others in groups of 4-6 to rehearse, perform, and record grade/skill appropriate repertoire. In this course, small ensembles will assign instrumental roles included, but not limited to: Guitar, Bass Guitar, Piano, Drum Kit, and Vocals. Students will develop intermediate/advanced understanding of Leadsheet Notation, Standard Notation, Tablature, Song Form, Chords, Chord Progressions, Transposition, Strumming, Rhythm, Recording and Genre.

Course Name: Music Theory
Prerequisite: N/A

Grades: 10-12
Credit: 0.5 Fine Art



UMA MUS101, 3 credits

Description: This is a semester course. Music theory is a semester course taking a student from the very beginning of reading music to a point where he or she can read musical scores, write melodies, or arrange a selection for small groups of instruments or voices. The first semester focuses on notation of pitch and rhythm, scales, chords, keys, etc. The second semester builds on that foundation to allow a student to create compositions, arrange music, or to analyze others' works. Students may take both semesters even if they already have some music reading skills since much of the work is done independently at the individual's own pace. Freshman are allowed with permission from the teacher. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

PERFORMING ARTS

Course Name: Music Theory AP

Prerequisite: Permission of the Instructor

Grades: 10-12

Credit: 1 Fine Art



UMA MUS101 & MUS102, 6 credits

Description: The AP Music Theory course corresponds to one or two semesters of a typical introductory college music theory course that covers topics such as musicianship, theory, musical materials, and procedures. Musicianship skills, including dictation and other listening skills, sight singing, and harmony, are considered an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also part of the curriculum through the practice of sight singing. Students understand basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are also emphasized. Music Theory is NOT required to take this class, but is highly recommended. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

INDUSTRIAL ARTS

| COURSE NAME | LEVEL | GRADE | LENGTH | PREREQUISITE |
|----------------------------------|--------|-------|----------|--|
| Introduction to Industrial Arts | | 9-12 | Year | |
| Architectural Drawing and Design | | 10-12 | Semester | Intro to IA or Permission of Instructor |
| CAD/CAM/Rapid Prototyping | | 10-12 | Semester | Intro to IA or Permission of Instructor |
| Fine Metals I | | 10-12 | Semester | Intro to IA or Intro to Art |
| Fine Metals II | | 10-12 | Semester | Fine Metals I |
| Forging | | 10-12 | Semester | Intro to IA or Intro to Art |
| Metals Design | | 10-12 | Semester | Intro to IA or Intro to Art |
| Wood Design | | 10-12 | Semester | Intro to IA |
| Wood Design Honors | Honors | 11-12 | Semester | Wood Design completion with high achievement or permission of instructor |

INDUSTRIAL ARTS

Course Name: Introduction to Industrial Arts

Prerequisite: N/A

Grades: 9-12

Credit: 1 Fine Art

Description: In this course students explore the appropriate use of tools and materials. Students study introductory woodworking, metalworking and technical drawing. The course focuses on the importance & practice of safety, planning and completion.

Course Name: Architectural Drawing and Design

Prerequisite: Intro to IA or Permission of Instructor

Grades: 10-12

Credit: 0.5 Elective

Description: This is a semester class. This elective course will provide the opportunity to understand the complexities of architectural design, provide a technical knowledge base for architecture, and complete the design and drawing of a set of house plans using Chief Architect CAD software. Students will also research historical architectural styles and their impact on current design.

Course Name: CAD/CAM/Rapid Prototyping

Prerequisite: Intro to IA or Permission of Instructor

Grades: 10-12

Credit: 0.5 Elective

Description: This semester course will provide the opportunity to understand the complexities of engineering drawing using Computer Aided Drafting (CAD) software extensively. Students will become proficient with CAD/CAM software for mechanical engineering: 3D printing and CNC Routing will be used to produce rapid prototypes of the CAD designs.

Course Name: Fine Metals I

Prerequisite: Intro to IA or Intro to Art

Grades: 10-12

Credit: 0.5 Fine Art

Description: Students will be introduced to fabrication techniques and design concepts associated with jewelry and small object construction. Through sawing, filing, soldering with a torch and hammering skills we will explore materials such as sterling silver, copper, brass and semi-precious gemstones. Projects will be focused around a design challenge and a technical component which will expand students' understanding of what jewelry and small object design can be while teaching them valuable skills associated with the industry.

Course Name: Fine Metals II

Prerequisite: Fine Metals I

Grades: 10-12

Credit: 0.5 Fine Art

Description: This course builds on the skills and basic design understanding students developed in Fine Metals I. New techniques and design challenges will be introduced and students will create both jewelry and ornamental small objects out of silver, copper and/or brass. Focus will be placed on design innovation and the growth of one's technical skills.

INDUSTRIAL ARTS

Course Name: Forging

Grades: 10-12

Prerequisite: Intro to IA or Intro to Art

Credit: 0.5 Fine Art

Description: This course introduces students to traditional blacksmithing techniques that center around forging steel while it's hot on an anvil. Students will make a variety of objects and be shown an assortment of decorative approaches for working with the metal. Emphasis is placed primarily on mastery of techniques, accurate reproduction of the example pieces, craftsmanship, and perseverance however, aesthetics, design development and ergonomics will also be addressed. If you enjoy this class you might also consider taking Fine Metals.

Course Name: Metals Design

Grades: 10-12

Prerequisite: Intro to IA or Intro to Art

Credit: 0.5 Fine Art

Description: Is a Semester class that expands upon the Introduction to IA Metals unit. Course content will include Arc, MIG, Plasma and Oxy-Fuel Welding and cutting, Sheet Metal development and Casting/Foundry.

Course Name: Wood Design

Grades: 10-12

Prerequisite: Intro to IA

Credit: 0.5 Fine Art

Description: This course is an in-depth experience in woodworking. It focuses on solving problems related to more Honors student projects. Emphasis is placed on creative design and more specialized use of tools and machinery.

Course Name: Wood Design Honors

Grades: 11-12

Prerequisite: Wood Design completion with high achievement or Permission of Instructor

Credit: 0.5 Fine Art

Description: This is a semester course. This course expands upon the design and construction techniques of Wood Design. Students will explore the properties and qualities of wood that lend themselves to more free form, creative work. They will be exposed to various artists and cultural contributions of the woodworking arts throughout history. Students will design and create works in wood that show an understanding of line, shape and form. They will be expected to record plans and progress through a sketchbook and/or notebook. The course will culminate with a student exhibition.

WORLD LANGUAGE

| COURSE NAME | LEVEL | GRADE | LENGTH | PREREQUISITE |
|-----------------------|--------|-------|--------|--------------|
| French 1 | | 9-12 | Year | |
| French 2 | | 9-12 | Year | French 1 |
| French 3 | | 10-12 | Year | French 2 |
| French 4 Honors | Honors | 11-12 | Year | French 3 |
| French 5 Honors | Honors | 11-12 | Year | French 4 |
| German 1 | | 9-12 | Year | |
| German 2 | | 9-12 | Year | German 1 |
| German 3 | | 10-12 | Year | German 2 |
| German 4 Honors | Honors | 11-12 | Year | German 3 |
| German 5 Honors | Honors | 11-12 | Year | German 4 |
| Spanish 1 | | 9-12 | Year | |
| Spanish 2 | | 9-12 | Year | Spanish 1 |
| Spanish 3 | | 10-12 | Year | Spanish 2 |
| Spanish 4 Honors | Honors | 11-12 | Year | Spanish 3 |
| Spanish 5 Honors | Honors | 11-12 | Year | Spanish 4 |
| Intercultural Studies | | 9-12 | Year | |

WORLD LANGUAGE - FRENCH

In today's global economy it is imperative that America's workforce understand other cultures and languages in order to compete. Studying a world language not only exposes students to diverse cultures and expands their understanding of our world, but it also helps students to better understand their own language and how it works.

Course Name: French 1

Prerequisite: N/A

Grades: 9-12

Credit: 1 Elective

Description: This is a novice level French class. Speaking, listening, writing and reading will be equally stressed, with a natural approach to learning language emphasized. We will be using French in class from day one, providing input that is comprehensible. This course is open to anyone ready to begin a study of French with the goal of becoming a proficient speaker and writer. French and Francophone cultures and cultural influence will be discussed throughout the course. Students are expected to reach an ACTFL proficiency of Upper Novice.

Course Name: French 2

Prerequisite: French 1

Grades: 9-12

Credit: 1 Elective

Description: This course focuses on improving spoken and written fluency in French, while covering some specific grammar points, and encouraging an appreciation of global francophone cultures (including franco-American). Students work in the upper novice ACTFL proficiency levels in this class.

Course Name: French 3

Prerequisite: French 2

Grades: 10-12

Credit: 1 Elective

Description: This course focuses on improving spoken and written fluency in French, while encouraging an appreciation of global francophone cultures (including franco-American). Students should reach an ACTFL proficiency level of intermediate by the end of this class.

Course Name: French 4 & 5 Honors

Prerequisite: French 3 or 4

Grades: 11-12

Credit: 1 Elective

Description: This course is a course taught primarily in French. Speaking, listening, writing and reading will be equally stressed. Students are expected to reach an ACTFL proficiency level of Intermediate-mid.

WORLD LANGUAGE - GERMAN

Course Name: German 1

Prerequisite: N/A

Grades: 9-12

Credit: 1 Elective

Description: This is an introductory course, which emphasizes the development of listening, speaking, reading and writing skills. The importance of practical vocabulary will be stressed. Basic language structures will be introduced. Culture will be presented through a variety of activities and projects. Students will develop the skills of note-taking, organization and cultural awareness. Student expectations align with Maine Learning Results for World Language Standard: Novice Mid.

Course Name: German 2

Prerequisite: German 1

Grades: 9-12

Credit: 1 Elective

Description: This is a CP level German course designed for students who desire a course more focused on sentence structure and situational writing and speaking. This course focuses its efforts on the skills of listening, speaking, reading, writing, and a deeper understanding of German culture. A holistic use of German will be emphasized so that these students leave with a lasting memory of German culture and practical language. Student expectations align with Maine Learning Results for World Language Standard: Novice High.

Course Name: German 3

Prerequisite: German 2

Grades: 10-12

Credit: 1 Elective

Description: This is a German course designed for students who desire a faster-paced, more grammatically intensive German course. This course focuses its efforts on the skills of listening, speaking, reading, writing, and a deeper understanding of German culture. A holistic use of German will be emphasized so that these students leave with a lasting memory of German culture and practical language. Student expectations align with Maine Learning Results for World Language Standard: Novice High or Intermediate Low.

Course Name: German 4 & 5 Honors

Prerequisite: German 3 or 4

Grades: 11-12

Credit: 1 Elective

Description: This is an Honors level German course designed for students who desire a faster-paced, more grammatically intensive, communicative German course. This course focuses its efforts on the skills of listening, speaking, reading, writing, and a deeper understanding of contemporary German life, media and culture. A holistic use of German will be emphasized so that these students leave with a lasting memory of German culture and practical language. Student expectations align with Maine Learning Results for World Language Standard: Intermediate Mid for German 4 (Intermediate High for German 5). Students will be provided with the opportunity to apply for the Maine Seal of Biliteracy.

WORLD LANGUAGE - SPANISH

At all levels of language study, current events, historical influences, and geographical influences are discussed.

Course Name: Spanish 1

Prerequisite: N/A

Grades: 9-12

Credit: 1 Elective

Description: This first-year course introduces the beginning language student to the Spanish language and culture. It includes the basic skills of speaking, reading, writing, and listening. The course places particular emphasis on developing reading skills. Students do this by learning conventional basic vocabulary, patterns, and reading materials on very familiar topics in the target language. Student expectations align with Maine Learning Results for World Language Standard: Novice Mid.

Course Name: Spanish 2

Prerequisite: Spanish 1

Grades: 9-12

Credit: 1 Elective

Description: This course builds on the skills of Spanish I. It is designed for students who desire to continue learning the language and culture at the novice level. It places more emphasis on the development of listening skills through music, videos, and short audio recordings. Students refine basic grammatical concepts to write short passages on familiar topics in Spanish. Conversational abilities are developed more fully because of the interaction in the target language during instruction. Students are encouraged to speak in Spanish as much as possible. Student expectations align with Maine Learning Results for World Language Standard: Novice High.

Course Name: Spanish 3

Prerequisite: Spanish 2

Grades: 10-12

Credit: 1 Elective

Description: This course continues to strengthen conversational, reading, and writing skills and requires students to independently review previously learned concepts. Students develop their oral, written, and reading abilities through spontaneous class discussions and book readings. Presentations on various familiar topics are also developed through the course while learning some advanced grammar concepts. Student expectations align with Maine Learning Results for World Language Standard: Intermediate Low.

Course Name: Spanish 4 & 5 Honors

Prerequisite: Spanish 3 or 4

Grades: 11-12

Credit: 1 Elective

Description: In this Honors course, conversational and literary fluency are goals. It is faster-paced, more grammatically intensive, and communicative. Students read books and news on current events from Spanish and Latin American resources. This course focuses on writing essays and journals using more advanced grammar concepts with connectors on familiar or researched topics. The class will be conducted almost exclusively in Spanish. Student expectations align with Maine Learning Results for World Language Standard: Intermediate Mid for Spanish 4 (Intermediate High for Spanish 5). Students will be provided with the opportunity to apply for the Maine Seal of Biliteracy.

OTHER WORLD LANGUAGE ELECTIVES

Course Name: Intercultural Studies

Prerequisite: N/A

Grades: 9-12

Credit: 1 Elective

Description: This class offers students the opportunity to better understand culture and to think about what factors shape culture. Students examine aspects of their own cultures and deepen awareness of cultural diversity in Maine, and further outward to our country and world. Students draw connections and distinctions between different languages, traditions, histories, and ways of life. This class prepares students to communicate better with people of backgrounds and beliefs different from their own, and the class helps to build respect and empathy for others.

CAREER PREPARATION

| COURSE NAME | LEVEL | GRADE | LENGTH | PREREQUISITE |
|--|-------|-------|----------|--------------------------|
| Technology and Career Exploration | | 9 | Semester | |
| Accounting | DE | 11-12 | Year | |
| Intro to Computer Applications (Offered every other year) | DE | 10-12 | Semester | |
| JMG (Jobs for Maine Graduates) | | 9-12 | Year | |
| Personal Finance | | 11-12 | Semester | |
| Web Design (Offered every other year) | DE | 10-12 | Semester | |
| Yearbook | | 11-12 | Year | Permission of Instructor |

CAREER PREPARATION

Course Name: Technology and Career Exploration

Prerequisite: N/A

Grades: 9

Credit: 0.5 Technology

Description: This course is intended as the starting point for learning skills that will help freshmen start the journey towards career exploration and the skills required to become successful in the future workplace. Activities will apply to both technology and the soft skills that future employees need. This class is required for all students.

Course Name: Accounting

Prerequisite: N/A

Grades: 11-12

Credit: 1 Elective



AC111, 3 credits

Description: This is an introductory course designed to familiarize the student with the basic theories and principles of accounting. It introduces the student to the accounting cycle, the use and construction of the worksheet, and financial statements. Web-based software is used. This course is appropriate for students interested in business-related careers. It is also recommended for any student considering college in any business field. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college.

Course Name: Intro to Computer Applications

Prerequisite: N/A

Grades: 10-12

Credit: 0.5 Elective



CS115, 3 credits

Description: This course introduces the student to a suite of software tools critical to academic and workplace success (word processing, spreadsheets, E-mail, Internet tools, presentation graphics, and databases). Dual enrollment course offerings are subject to teacher availability and approval from the partnering college. **Offered every other year - is offered for the 2024-2025 school year.**

Course Name: JMG

Prerequisite: N/A

Grade: 9-12

Credit: 1 Elective

Description: The JMG program emphasizes the following: Personal, educational and career pathways and opportunities, improved academics, and connectedness to classmates. JMG's curriculum includes career development, job attainment, job survival, leadership, self-development and personal skills. Throughout the school year, JMG Specialists engage students in a variety of group activities, community service projects and social awareness events. Students participate in fundraising, service learning, field trips, job shadows, financial literacy programs, and career exploration activities. Students may choose to be part of the JMG program for multiple years of high school.

CAREER PREPARATION

Course Name: Personal Finance

Prerequisite: N/A

Grades: 11-12

Credit: 0.5 Financial Lit

Description: This is a semester class. As adults, students will need to make sound financial decisions to achieve their personal lifestyle goals. Topics include money management skills, insurance & risk management, budgeting, and more.

Course Name: Web Design

Prerequisite: N/A

Grades: 10-12

Credit: 0.5 Technology



CS140, 3 credits

Description: This is a semester class. This course focuses on such topics as beginning HTML, Web standards and accessibility, communication skills and strategies, creation of Web media, and the planning, development, publishing, and evaluation of Web sites. The project- based activities include teamwork strategies that reflect real-world work-skills and the activities performed by professional Web designers. Dual enrollment course offerings are subject to teacher availability and approval from the partnering college. **Offered every other year - is offered for the 2025-2026 school year.**

Course Name: Yearbook

Prerequisite: Permission by Instructor

Grades: 11-12

Credit: 1 Elective

Description: Learn to use Treeings's Yearbook software, a publishing program, while actually designing The Concord, Maranacook's yearbook, and preparing the entire book for publication. This class is appropriate for juniors and seniors who want to learn the publishing program and work in a business style class that will prepare the yearbook.

ADDITIONAL ELECTIVES

Course Name: Teen Issues

Grades:10-12

Prerequisite: N/A

Credit: 1 Elective

Description: It's not easy being a teenager in today's world. From depression and eating disorders to bullying and cutting, teens grapple with a wide range of issues as they grow and develop. On the other hand there is much for teens to celebrate as they explore new learning opportunities in topics not always addressed in course work, or find creative expression in the arts. In this service learning course students will drive the development and delivery of the annual Teen Issues program at Maranacook. Students will collaborate to identify topics for the program, secure workshops and presenters, plan engaging assemblies to kick off and close the program, and evaluate the event. Our goal is to provide students the opportunity to apply collaboration, communication, and problem solving skills to serve the whole school community.

Course Name: Work Experience

Grades: 9-12

Prerequisite: Permission of School Counselor

Credit: 0.5/1 Elective

Description: This is a Semester/Year long course. Students may participate in a variety of work experiences at school by assisting teachers, including teachers at the middle school, assisting in the office, library or in the food service program. The application forms are available in the guidance office. Credit is awarded by semester. Participation in this course is above and beyond this six course requirement.

Course Name: Off-Site Work Experience

Grades: 12

Prerequisite: Permission of Administrator

Credit: 1 Elective/Sem

Description: This is a semester/year long course. Students who would like to combine their career aspirations with a work experience may interview to participate in a job experience outside of the school. Students are required to enroll in consumer economics for the classroom portion of the program. Participating students must find a job and submit an employee contract agreement. Individual work plans are developed with the instructor and school counselor. Credit is awarded by semester.

EARLY COLLEGE CREDIT

EARLY COLLEGE CREDIT

Grades: 9-12

Prerequisite: Application with School Counselor

Description: The University of Maine System as well as the Maine Community College System allows students to take up to 12 free credit hours per year. Maine high school students participating in Early College programming are responsible for course-specific fees (e.g. lab fees, travel/housing fees, materials or supplies fees, access-code fees, etc.). Students should meet with their counselor to determine appropriate course selection.

MARANACOOK ALTERNATIVE PROGRAM

The Maranacook Alternative Program guides alternative learners toward graduation within a creatively individualized educational environment. Academic and 21st century skills are fostered through experiential, community-based learning challenges. We aim to develop within our students a strong sense of respect for self, others, and community. Students foster independence and responsibility by working through effective problem solving and group processing strategies. Most importantly, students gain a deeper understanding of themselves as lifelong learners. For more information contact Guidance or Ian Fyfe at ian_fyfe@maranacook.com

SPECIAL EDUCATION

What does Special Education look like at Maranacook Community High School? The high school Special Education programs are an integral part of our educational approach to provide each student the opportunity and support necessary to learn in the least restrictive, and most supportive, educational environment. The high school offers a continuum of services, which include the Learning Center and the Transitional Skills Program. The Learning Center provides support through a structured study hall approach, which assists students in accessing their regular education courses, as well as developing organizational and study skills. In addition, it provides remedial direct instruction in developing reading and writing skills. The Transitional Skills Program provides instruction and practice in functional living skills, including utilizing community resources and supports in addition to career exploration through work experiences.

All of the programs offered at the high school use the inclusion model of education, whenever possible. This approach to education would not be successful without the wonderful group of highly qualified and supportive educational technicians, teachers, staff and administrators, who provide support in and out of regular education classes and to special educators. This approach also mirrors the Maranacook Community High School's mission statement, which promotes the belief that every individual can flourish academically and socially, according to his or her ability.

The Special Education departments in both the high school and middle school work closely to help ensure a seamless transition from the middle school setting to the high school community, where the focus becomes post-secondary planning. Participation in these programs is determined through the Individual Education Plan (IEP) process.

CAPITAL AREA TECHNICAL CENTER

| Course Name | Length | Prerequisite |
|--------------------------------------|--------|--|
| Auto Body Repair-Paint & Refinishing | Year | |
| Automotive Technology I | Year | Knowledge of Algebra 1 concepts, ability to work formulas and equations, reading and writing at grade level |
| Automotive Technology II | Year | Automotive Technology I & Application |
| Building Construction | Year | Mastery of measuring, reading, arithmetic, and computation skills; experience with using a full function calculator for use of basic mathematical operations and to perform calculations using fractions and decimals. |
| Business Academy 1 & 2 | Year | |
| Computer Technology I | Year | |
| Computer Technology II | Year | Computer Technology I & Application |
| Culinary Arts | Year | Understanding of basic math skills and knowledge of algebra, especially with fractions, have average reading and writing skills, and be computer literate. |
| Culinary Arts II | Year | Culinary Arts & Application |
| Early Childhood Education | Year | Must be at least 16 years old. Students should have excellent reading and writing skills and be strong communicators. |
| Electrical Technology | Year | |
| Emergency Medical Technician | Year | Students must be at least 18 years of age to be eligible for the State of Maine EMT license. Prior to age 18, students may test with the National Registry certification and work under a Maine licensed EMT until they reach the age of 18 and acquire their own State of Maine EMT license. Students have two years from the successful completion date of the EMT program to take the National Registry EMT exam. Students must have a physical examination within the past year confirming good physical and mental health and be up to date with vaccinations, including COVID, Hep B, and Flu shots. Extensive reading and written work will be required |
| Firefighting | Year | Students should have the willingness to work hard as a part of a team. High standards of professionalism, ethical and moral behavior are required. |

CAPITAL AREA TECHNICAL CENTER

| Course Name | Length | Prerequisite |
|---|--------|--|
| Graphic Design and Printing I | Year | |
| Graphic Design and Printing II | Year | Graphic Design and Printing I & Application |
| Law Enforcement | Year | |
| Machine Tool Technology and Fabrication I | Year | |
| Machine Tool Technology and Fabrication II with Welding | Year | Machine Tool Technology & Welding Fabrication I & Application |
| Medical/Veterinarian Terminology | Year | |
| Nursing Assistant | Year | Attendance is vital to this program, as there are state mandated hour requirements that must be fulfilled prior to taking the State CNA exam. A student must be at least 16 years of age to be eligible for the program. Teachers in the Health Careers Academy encourage juniors to take the Medical Terminology course at CATC to provide a solid foundation of the medical language and determine if the medical field is a good fit for the student before enrolling in the CNA program as a senior. Students are required to have up to date vaccinations including COVID, Hepatitis series, MMR, Influenza and a TB Test before November 1st each school year to participate in clinical hours required for State CNA certification. |
| Plumbing & Heating | Year | |

CAPITAL AREA TECHNICAL CENTER

Capital Area Technical Center (CATC) offers diverse, safe and innovative learning experiences in which highly skilled educators empower students in developing competencies needed to achieve their future goals.

Course Name: Auto Body-Paint & Refinishing

Grades: 11-12

Prerequisite: N/A

Credit: 3 Electives

Descriptions: Auto Body – Paint & Refinishing is a two year program providing instruction in all phases of automotive refinishing and non-structural repair.

Students will cover the basics of Automotive Repair and Refinishing. Students will work with spray guns and related equipment while in the spray booth and mixing room. They will also learn how to identify paint defects, along with their causes and how to correct them. Color theory and application will also be covered in addition to detailing and cleanup. During the school year, students will be assigned to projects on donor vehicles along with repair panels that will enhance their skill level.

Students will also cover surface preparation. During the course, students will receive hands on training on both steel and plastic exterior panel repair and replacement. The curriculum will focus on the proper disassembly and reassembly of motor vehicles. Students will learn how to deal with moveable glass and hardware and trim removal and replacement. Students will also learn concepts in the use of plastics and adhesives in the repair procedure.

During the year, students will be working on shop projects and some customer vehicles. In the final semester, with instructor permission, students may be allowed to bring in a vehicle for repair. The Auto Body program also includes topics such as: ethics, resume writing, job interviewing and has an intensive safety program.

For the 2nd year student, the program reinforces previous skills learned and introduces a more individual learning plan. This is achieved through more complex projects that involve problem solving.

Qualities of a Successful Student

Ability to work with fractions and ratios
Willing to learn and be responsible
Hard working with lots of hands on projects
Work SAFELY
Ability to read and write at grade level

Certifications Offered:

NATEF/ASE Student Certification Program
OSHA 10 hour General Industry Course
SP/2 Safety Program

College Credit Opportunities:

Articulation Agreements with:
New England Institute of Technology (NEIT)
Lincoln Tech

CAPITAL AREA TECHNICAL CENTER

Course Name: Automotive Technology I

Grades: 11-12

Prerequisite: Knowledge of Algebra 1 concepts, ability to work formulas and equations, reading and writing at grade level

Credit: 3 Electives

Description: The automotive technology program will prepare students for entry level positions in the automotive field. The Maintenance and Light Repair curriculum is approved by The National Automotive Technicians Education Foundation (NATEF), and the program is NATEF certified in the following areas: brakes, electrical, engine performance, steering and suspension, engine repair, automatic and manual transmissions, and heating and air conditioning. Industry standards are used and incorporated as well as up to date equipment to prepare a student for today's work environment. Students will be taught professionalism that an employer will expect on the job. The program offers a second year to improve students' skills and to advance knowledge in additional areas.

Qualities of a Successful Student

Knowledge of Algebra I concepts

Ability to work formulas and equations

Ability to read and write at grade level

Certifications Offered:

NATEF Brakes

NATEF Electrical

NATEF Engine Performance

NATEF Steering and Suspension

SP/2 Safety Program

College Credit Opportunities:

Articulation Agreements with:

Southern Maine Community College

Central Maine Community College

Course Name: Automotive Technology II

Grades: 12

Prerequisite: Students who have successfully completed Automotive Technology I may apply. Applications will be considered based on a rubric provided by CATC.

Credit: 3 Electives

Description: Students will continue the work started in Automotive Technology 1 by advancing their knowledge of automotive electronics, engine performance, and steering and suspension. **This course is offered in the 11:30-1:30 PM session only.**

Certifications Offered:

NATEF Electrical

College Credit Opportunities:

Articulation Agreements with:

Southern Maine Community College

Central Maine Community College

Dual Enrollment with:

Southern Maine Community College

CAPITAL AREA TECHNICAL CENTER

Course Name: Building Construction

Grades: 11-12

Credit: 3 Electives

Description: The Business Academy is a dual enrollment program designed to provide students with the fundamental skills necessary for success as they continue their education after high school and enter the workforce. Students enrolled in the Business Academy have the opportunity to earn up to 15 college credits one year, and up to 18 college credits the following year, for a maximum of 33 college credits. It is an excellent foundation for business education at the post-secondary level. If you are thinking about starting your own business or attending college for a business/management/sports major, these courses will give you a strong background in business education, while shortening your college length and expenses.

For the 2nd year student, the program reinforces previous skills learned and introduces a more individual learning plan. This is achieved through more complex projects that involve problem solving.

Qualities of a Successful Student

Ability to perform calculations using fractions and decimals

Ability to work with carpentry hand held tools

Ability to perform measurements and basic computations

Ability to function in a wood shop using the latest stationary and hand held tools with confidence and safety

Certifications Offered:

OSHA 10 hour

NOCTI

College Credit Opportunities:

Dual Enrollment with:

Central Maine Community College

Course Name: Business Academy 1 & 2

Grades: 11-12

Prerequisite: N/A

Credit: 3 Electives

Description: The Business Academy is a dual enrollment program designed to provide students with the fundamental skills necessary for success as they continue their education after high school and enter the workforce. Students enrolled in the Business Academy have the opportunity to earn 15-18 credits per year. One year, students can earn up to 15 college credits, the next year, students can earn up to 18 college credits. This year it is 18, so next year will be 15. It is an excellent foundation for business education at the post-secondary level. If you are thinking about starting your own business or attending college for a business/management/sports major, these courses will give you a strong background in business education, while shortening your college length and expenses.

The expected college courses offered are:

Fall 2024: Personal Finance, Entrepreneurship, Communications

Spring 2025: Management, Computer Applications

Fall 2025: Introduction to Business, Public Speaking, Business Math

Spring 2026: Marketing, Business Law, Accounting

[Table of Contents](#)

CAPITAL AREA TECHNICAL CENTER

College Credit Opportunities:

Dual Enrollment with:

Northern Maine Community College

Thomas College

Course Name: Computer Technology I

Prerequisite: N/A

Grades: 11-12

Credit: 3 Elective

Description: The program will incorporate background work for the A+ Certification Test. Students will have classroom work and hands-on experience that will prepare them for entry-level positions and/or post secondary computer related programs. Testout PC Pro Course: PC Hardware and Software curriculum provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level information and communication technology (ICT) professionals. The curriculum covers the fundamentals of PC technology, networking, and security and also provides an introduction to advanced concepts. Testout in an online and interactive textbook we use in class that students work on individually. Testout represents both certifications and course content, students who successfully complete the Testout content can sit for a certification in the same course.

Qualities of a Successful Student

Patience, empathy, and active listening. Computer problems can be incredibly frustrating.

Time management skills

A drive to succeed

Consistency of an online world

Task oriented mindset

Certifications Offered:

Testout PC Pro

NOCTI

Testout Security Pro

Testout Linux Pro

College Credit Opportunities:

Dual Enrollment with:

Central Maine Community College

University of Maine at Augusta

CAPITAL AREA TECHNICAL CENTER

Course Name: Computer Technology II

Grades: 12

Prerequisite: Students who have successfully completed Computer Technology 1, or have obtained Testout PC PRO certification, or have obtained CompTIA A+ certification, or demonstrated a fundamental understanding of technology. Applications will be considered based on a CATC rubric.

Credit: 3 Elective

Description: This program will prepare students for the CompTIA Network+ exam. Students gain the knowledge and skills they need to install, configure and maintain a network for a small business. The program provides students with simulations, lectures, hands on application, and preparation on the certification exam. Students will further their knowledge and resume with the additional networking skills at their disposal. This is an accelerated class with the second half of the school year open to possibility of more certifications, college credit, and/or a student project. Testout in an online and interactive textbook we use in class that students work on individually. Testout represents both certifications and course content, students who successfully complete the Testout content can sit for a certification in the same course.

Certifications Offered:

Testout Network Pro
Testout Security Pro
Testout Linux Pro
NOCTI

College Credit Opportunities:

Dual Enrollment with: University of Maine at Augusta

Course Name: Culinary Arts I

Grades: 11-12

Credit: 3 Elective

Description: The Culinary Arts program trains students that are serious for a career in the Food Service Industry. Students learn basic food preparation and safety, menu planning, baking fundamentals and proper dining room service techniques through daily lab work. Students are expected to participate in in-house functions, banquet services and outside catering events coordinated by a professional chef with over 20 years of experience. Employment potential is excellent, and there are many post-secondary opportunities available. Students will complete a resume, compete in cooking challenges, learn basic prep of mother sauces, and complete basic knife cuts. Students will have opportunities to participate in ProStart Culinary Team Competitions, ProStart Management Competitions, and/or SkillsUSA Hospitality Competitions.

Qualities of a Successful Student

Basic math skills, especially with fractions, have average reading and writing skills
Good attendance is a must, be self-motivated, the desire to pursue a career in the Foodservice Industry
Be able to stand for long periods of time, have the ability to work in individual and team settings, and have the ability to comprehend oral instructions
Good hygiene practices

Certifications Offered:

Serv-Safe Food Handler
NOCTI

CAPITAL AREA TECHNICAL CENTER

College Credit Opportunities:

Articulation agreements with:
Central Maine Community College
Culinary Institute of America
Eastern Maine Community College
Kennebec Valley Community College
Southern Maine Community College

Course Name: Culinary Arts II

Grades: 12

Prerequisite: Students who have successfully completed Culinary Arts I
Credit: 3 Elective
may apply. Applications will be considered based on a rubric provided by CATC.

Description: The Culinary Arts II program further trains Culinary I students that are serious for a career in the Food Service Industry. Culinary II students will learn advanced techniques in food preparation and baking. They will also gain advanced knowledge of cuisines by a professional chef with over 20 years of experience. Students will also learn advanced dining room preparation of tableside cooking and advanced industry knowledge. Students will also help in mentoring first year students in basic knowledge of culinary arts. Students will be held responsible for leading, coordinating, and accomplishing advanced assignments using independent performance. Students will complete a portfolio, perform cooking demonstrations, make advanced sauces made with mother sauces, and be eligible for hospitality certifications. Students will have opportunities to participate in ProStart Culinary Team Competitions, ProStart Management Competitions, and/or SkillsUSA Hospitality Competitions.

Certifications Offered:

Serv-Safe Food Handler
NOCTI

College Credit Opportunities:

Dual Enrollment with:
Kennebec Valley Community College
Articulation agreements with:
Central Maine Community College
Culinary Institute of America
Eastern Maine Community College
Southern Maine Community College

Course Name: Early Childhood Education

Grades: 11-12

Credit: 3 Elective

Description: Early Childhood Education offers two (2) one-year programs based on the standards put forth by the National Association for the Education of Young Children. All students, regardless of the year of enrollment, will assist in operating an on-site preschool program and will interact with local teachers and daycare providers when completing student teaching opportunities in the community. Students will work to develop a professional portfolio constructed on the preparation standards from the National Association for the Education of Young Children (NAEYC).

During the 2024-25 school year, students will focus on safe and healthy environments, as well as curriculum development. They will design a classroom layout, learn how to choose safe materials for children, receive training around safety and child abuse, and develop a curriculum based on standards.

[Table of Contents](#)

CAPITAL AREA TECHNICAL CENTER

During the 2025-26 school year, students will become acquainted with professional opportunities and expectations related to the early childhood field, learn about child development, prenatal to age eight and receive instruction regarding assessment, and how to measure if children are growing and learning.

Qualities of a Successful Student

Students should have excellent reading and writing skills and be strong communicators

Students must be 16 to participate in this program

Students should be trustworthy and be willing to sign a confidentiality agreement

Students should be able to work independently, as well as be able to work as part of a team

Certifications Offered:

OSHA StartSafe

First Aid/CPR

Mandated Reporter

Begin a CECA (Certified Early Childhood Assistant) which may be completed during the 2nd year of the Early Childhood Education program.

BHP (Behavioral Health Professional, 2nd year students)

NOCTI

College Credit Opportunities:

Dual enrollment with:

University of Maine at Augusta

Course Name: Electrical Technology

Prerequisite: N/A

Grades: 11-12

Credit: 3 Elective

Description: The Electrical Technology program is a one or two-year program using the NCCER curriculum. The first year focuses primarily on electrical theory, safe work practices, residential wiring and starts the commercial wiring lessons. The second year covers additional NEC considerations, commercial wiring, HVAC controls, industrial motor controls and troubleshooting.

All students receive a State of Maine Electrical Helper's license, and OSHA 10 safety course, and upon completing two years earn all 576 education hours and 1000 working hours, credit towards Electrician licensing, and upon passing the NCCER test they will earn NCCER electrical education certification.

Class time is split between class instruction, practical wiring, labs, and real-world projects in the school and the local community. Sections of the National Electrical Code (NEC) pertaining to residential wiring are covered in detail.

Students apply the current code in designing and installing an entire home wiring system including meter enclosure and load center. Students apply the current code in understanding the engineered blueprints for a commercial building and installing the electrical system. Students learn how HVAC control systems work and how to design and install the control systems. Students learn the basics of how to install and maintain industrial motor control systems.

Students also have the opportunity to compete in the Skills USA contests at the local, state, and national levels. The Electrical Technology Program, using the NCCER curriculum teaches students electrical theory, residential wiring commercial construction wiring, motor controls wiring and HVAC controls wiring. Students will leave the program with the skills required to work for an electrical contractor at an entry-level position or continue their education.

CAPITAL AREA TECHNICAL CENTER

CATC Electrical Technology program, using the accredited NCCER curriculum, is recognized by the State of Maine Electricians' Examining Board. Graduates of the CATC Electrical Trades course two-year program meet 576-hour education requirement to take the Journeyman Electricians Exam.

Upon completion of the program, students have several options:

- Go directly to work for a contractor and complete the additional 7000 work hours (3.5 year) required to take their journeyman's exam
- Take the exam after working 5000 hours to receive their journeyman's in training license
- Continue education and earn an associate's degree in an electrical area of study
- Continue education and earn a bachelor's degree in Electrical Engineering
- Enter the IBEW 5 year apprenticeship program at an elevated level
- Expect to earn \$18-25 fresh out of CATC's program, and earn \$50-75 per hour after 5 years and becoming a Journeyman Electrician

Qualities of a Successful Student

Maturity and desire to work towards developing valuable job skills

Ability to perform calculations using fractions and decimals

Ability to perform basic computations

Ability to read and write at grade level and interpret technical texts

Attendance – students must meet the state mandated hour requirements in order to get licensing credit.

Certifications Offered:

Maine Electrical Helper's License

OSHA 10 hour Safety Certificate

Skills USA Certification Points

National Home Builders Association (NAHB) Residential Wiring Certification

Completion of 2 years:

576 education hours requirement towards the State of Maine Journeyman License Exam

1000 working hours requirement towards the State of Maine Journeyman License Exam

College Credit Opportunities:

Articulation Agreements with:

Central Maine Community College

Eastern Maine Community College

Kennebec Valley Community College

Northern Maine Community College

Southern Maine Community College

Washington County Community College

CAPITAL AREA TECHNICAL CENTER

Course Name: Emergency Medical Technician

Grades: 11-12

Prerequisite: Students must be at least 18 years of age to be eligible for the State of Maine EMT license. Prior to age 18, students may test with the National Registry certification and work under a Maine licensed EMT until they reach the age of 18 and acquire their own State of Maine EMT license. Students have two years from the successful completion date of the EMT program to take the National Registry EMT exam. Students must have a physical examination within the past year confirming good physical and mental health and be up to date with vaccinations, including COVID, Hep B, and Flu shots. Extensive reading and written work will be required.

Credit: 3 Elective

Description: Emergency Medical Technicians (EMTs) are a critical link between the scene of an emergency and the health care system. In the EMT program, students will learn how to provide out of hospital emergency medical care and transportation for critical and emergent patients who access the emergency medical services (EMS) system. Through lectures, hands-on activities and scenarios, students will have basic knowledge and skills necessary to stabilize and safely transport patients ranging from non-emergency and routine medical transports to life-threatening emergencies. EMT program students will practice interventions with the basic equipment typically found on an ambulance. The Emergency Medical Technician (EMT) program prepares the EMT student to provide pre-hospital assessment care for patients of all ages with a variety of medical conditions and traumatic injuries. It is a great foundational program for any student with an interest in working in the medical, public safety or firefighting fields.

This program is offered during the 9:00 - 11:00 AM session only.

For those pursuing a career in EMS (Emergency Medical Services) this certification can be applied to a Paramedicine degree programs through the Maine Community College System.

Qualities of a Successful Student

Ability for college level work
Ready to complete homework assignments
Empathy and compassion
Willingness to work as part of a team
Stellar communication skills

Certifications offered:

National Registry EMT
Healthcare provider CPR/AED
National incident management System

College Credit Opportunities:

Dual enrollment with:
Kennebec Valley Community College

CAPITAL AREA TECHNICAL CENTER

Course Name: Fire Fighting

Grades: 11-12

Prerequisite: Students should have the willingness to work hard as a part of a team. High standards of professionalism, ethical and moral behavior are required in and out of the classroom.

Credit: 3 Elective

Description: This program is a combination of in-class theory and hands-on experiences. The program's home base is Capital Area Technical Center, but a portion of time is spent at the Augusta Fire Department's Western Avenue station participating in real world, live experiences. There is a combination of classroom, fitness training, and hands-on experiences using firefighting tools and equipment. Reading and written work are also required. **This program is offered during the 11:30 - 1:30 PM session only.**

Topics covered include: History of the Fire Service and Fire Department Operations; FireFighter Health and Safety; Personal Protective Equipment; Fire Service Communications; Fire Behavior; Building Construction; Portable Fire Extinguishers; FireFighter Tools and Equipment; Ropes and Knots; Forcible Entry; Ladders; Search and Rescue; Ventilation; Water Supply; Fire Hose, Appliances and Nozzles; Fire Suppression; FireFighter Safety and Survival; Salvage and Overhaul; Firefighter Rehab; Wildland and Ground Cover Fires; Establishing and Transferring Command; Advanced Fire Suppression; Vehicle

Rescue and Extrication; Assisting Special Rescue Teams; Fire Alarm and Detection Systems; Fire and Life Safety Initiatives; Fire Cause and Origin; Hazardous Materials Operations.

The goal of this program is to provide the knowledge, skills, and abilities to the students to ready them for a career in the fire service or to support their local volunteer fire departments, which is in great need of volunteers. Most importantly, students will learn the importance of the fire service community, the worldwide family of brothers and sisters working towards providing a service of life safety, property conservation, and environmental protection, the importance of teamwork, of assisting their teammates, confidence in their teammates and in themselves.

For those pursuing furthering their Firefighting education, certifications earned may be able to be applied to Fire Science programs through the Maine Community College System.

Qualities of a Successful Student

Desire to serve the public
Desire to work hard to gain knowledge, skills and abilities
Respect for yourself and others
Physically fit
Work well in a team environment

Certifications Offered:

Pro Board Certified Firefighter I&II and Hazardous Materials Operations level responder Certification
CPR/AED Certification
National Incident Management System 100/700 Certification

College Opportunities

Dual enrollment with:
Southern Maine Community College

CAPITAL AREA TECHNICAL CENTER

Course Name: Graphic Design and Printing 1
Prerequisite: N/A

Grades: 11-12
Credit: 3 Elective

Description: In this course, students will use their creativity and problem-solving skills to create original graphic and commercial art projects from concept, to design, to implementation. Students utilize the Adobe creative suite of products such as: Photoshop, Illustrator and InDesign to learn fundamentals of layout and design through hands on projects. Sample topic areas include Introduction to Graphic Design, Typography, Advertising, Logo Design, Digital Photography, Photo Manipulation/restoration, T-shirt Design etc. Students are also introduced to the following printing and finishing operations: screen printing, vinyl cutting/solvent printing, digital output, wide format printing, and basic bindery. An emphasis is placed on professional conduct and work ethic. Hands-on experience is gained through instructor lessons/lecture, followed by a project based on that lesson.

Recommendations: Students should have the ability to maintain focus and feel comfortable on a computer for an extended time; have basic math skills such as measurement, fractions, addition, subtraction, multiplication, division and percentages; exhibit appropriate workplace behaviors; ability to work independently and in group settings; understand and demonstrate safety concepts.

Qualities of a Successful Student

Professionalism, respect, self-motivation and honesty
Basic reading/writing skills and be able to communicate with other students and instructor on a daily basis
Ability to work at a computer station for extended periods of time
Basic computer skills and knowledge
An interest and willingness to sketch and draw
Creative thinking skills and an appreciation for art and design
Good Attendance

Certifications Offered:

NOCTI
OSHA 10 Hour General Industry

College Opportunities

Dual enrollment with:
Eastern Maine Community College
Husson University

Course Name: Graphic Design & Printing II

Grades: 12

Prerequisite: Students who have successfully completed Graphic Design may apply. Applications will be considered based on a CATC rubric. Second Year students should be skilled in time management and should be self-directed and self-motivated.

Credit: 3 Elective

Description: Students enrolled in this second level course will improve their design and printing skills through the production of jobs for non-profit organizations and schools. Students will complete higher level projects that have been built on the basic skills learned in Graphic Design I. Advanced topics will include: business identity package, 4 color t-shirt design and production, multi-color vinyl decal design and production, etc. Additional coursework will be tailored to individual interests. Students in Graphic Design II will also apply and demonstrate their skills by assisting first level students as mentors.

CAPITAL AREA TECHNICAL CENTER

Certifications Offered:

NOCTI

OSHA 10 Hour General Industry

Course Name: Law Enforcement

Prerequisite: N/A

Grades: 11-12

Credit: 3 Elective

Description: Students enrolled in the Law Enforcement program will experience an interactive and challenging environment that will leave them with all the skills required to get started in this career field. Students will study Crime Scene Investigations, Interviewing, Patrol Tactics, De-Escalation, Ethics, Use of Force, Maine Criminal and Traffic Law and much more. Students will go “hands on” with crime scene analysis, simulated firearms training, methods of restraint and control, first aid, traffic stops and drill & ceremony. A focus on community policing, ethics, effective report writing and de-escalation will be present. Students will be introduced to Local, County, State and Federal Law Enforcement programs. We will explore specialties including Tac Teams, K-9, Wardens, and Marine Patrol Law Enforcement, Search and Rescue, Detective and Criminal Patrol. Second year students will be given leadership opportunities, have expanded classes and participate in ride alongs. Students will be given the opportunity to participate in SkillUSA competitions, take field trips to post secondary institutions, The Maine Criminal Justice Academy, National Guard Facilities and much more.

Students will be issued uniforms and equipment and will be responsible for care and usage. Students are expected to make ethical decisions.

Qualities of a Successful Student

Ability to make ethical decisions

Participate in class sessions

Logical

Interest to foster critical thinking skills

Willingness to be physically fit

Desire to serve his/her community

Certifications Offered:

CPR/AED

CTECS

College Opportunities

Working future affiliations with Central Maine Community College and Husson University

CAPITAL AREA TECHNICAL CENTER

Course Name: Machine Tool Technology and Fabrication I

Prerequisite: N/A

Grades: 11-12

Credit: 3 Elective

Description: This course will introduce students in basic machining. Math is a big part of the program which includes fractions, conversion of fraction to decimals and geometry. Activities include: Milling and lathe machines, drill presses, surface grinding, blueprint reading and other tools found in the metal industry. Students will also be introduced to the aspects of Oxy/fuel Torch operations. All students will be expected to obtain a certification thru NOCTI (National Occupational Competency Testing Institute) for Precision Machining (4152v1). OSHA-10 (Occupational Safety and Health Administration) is another certification students will be expected to obtain. These credentials are universally recognized in the industry.

Qualities of a Successful Student

Professionalism, respect, self-motivation and honesty

Basic reading/writing skills and be able to communicate with other students and instructor on a daily basis

Ability to work with basic math, fraction conversion to decimal and basic geometry

Basic blueprint reading, knowledge to sketch a drawing

Safety awareness and follow PPE instructions

Certifications Offered:

NOCTI

OSHA-10

College Credit Opportunities:

Articulation agreement with:

Southern Maine Community College

Course Name: Machine Tool Technology and Fabrication II with Welding

Grades: 12

Prerequisite: Students that have successfully completed Machine

Credit: 3 Elective

Tool Fabrication I may apply. Applications will be considered based on a rubric provided by CATC.

Description: The course is an extension of the Machine Tool Technology I program with an increased level of expertise in machining and Math. The machinist projects assigned are more complex. Students will be exposed to Computer Numerical Control (CNC), four jaw chucking and other advanced processes. Upon completion of Machine Tool Technology II a student can have a limited opportunity to do some welding. Welding consists of the aspects of Shielded Metal Arc Welding (stick), Metal Inert Gas Welding (MIG) and Plasma Cutting. All students will be expected to obtain a certification thru NOCTI (National Occupational Competency Testing Institute) for Precision Machining (4152v1) at a higher level. An American Welding Society (AWS) 1G Plate certification can be achieved upon testing out.

Certifications Offered:

NOCTI

American Welding Society (AWS)

College Credit Opportunities:

Articulation agreement with:

Southern Maine Community College

CAPITAL AREA TECHNICAL CENTER

Course Name: Medical/Veterinarian Terminology

Prerequisite: N/A

Grades: 11-12

Credits: 3 Elective

Description: The first 3 quarters of the course will cover medical terminology. The 4th quarter of the course will cover veterinarian terminology (the first 3 quarters of medical terminology will continue to be used while learning more specific veterinary terminology). Students will learn human anatomy and physiology and companion animal anatomy and physiology, careers in the medical/veterinary sciences fields, medical terminology, and infection control procedures. There are hands-on labs with each unit of study i.e. Cell model, Dissection, Personal Protective Equipment application, Wound care, Range of Motion and pulse/respiratory rate skill on people and companion animals. There are weekly quizzes and assessments in this program. There will be a clinical rotation at the local animal shelter where students will provide basic care for companion animals in the spring. Students who successfully complete the program may be eligible to become employed in a medical office setting and/or veterinary clinic.

This is an excellent course to jump start your education in the health field because students will learn the language of medicine. This program is a great place to determine if a career in the medical/veterinary sciences is a good fit for you. Students in this program have the opportunity to earn three (3) college credits towards their future degree.

Qualities of a Successful Student

Positive attitude and willingness to learn a new language
Excellent reading and writing skills
Strong communication skills
Time management skills
Ability to work with others and step outside your comfort zone

Certifications Offered:

10 hour OSHA Veterinary Certification
ServSafe Basic Food Handler
Basic Pet First Aid & CPR
OSHA Employability Skills

College Credit Opportunities:

Articulation Agreements with:
Beal College
Southern Maine Community College

Dual Enrollment with:
Central Maine Community College

CAPITAL AREA TECHNICAL CENTER

Course Name: Nursing Assistant

Grades: 11-12

Credit: 3 Elective

Description: The NA program provides students with the opportunity to acquire knowledge and learn the skills necessary to become a Certified Nursing Assistant (CNA). Students will learn and practice hands-on care with live patients and residents. This includes personal hygiene including bathing the human body, transfers and movement, nutrition, elimination and toileting, communication, and vital signs. In the classroom, students learn about anatomy and physiology, diseases, illnesses, and conditions of the human body. There are weekly quizzes and assessments in this program. Qualified students who successfully complete the program have the opportunity to take the State of Maine Certified Nursing Assistant exam in the spring and to become a Certified Nursing Assistant. Students are prepared to work as a CNA and/or further their education in nursing or other medical fields.

Recommendations: Students are required to have up-to-date vaccinations including COVID, Hepatitis series, MMR, Influenza, and a TB Test before November 1st of each school year to participate in clinical hours required for State CNA certification.

Qualities of a Successful Student

Ability to read and write at a 9th grade level

Good attendance – students must meet the State mandated hour requirement prior to taking the CNA exam

Must be 16 years of age

Criminal background checks are required by the State in order to complete the CNA certification

Certifications Offered:

State of Maine Certified Nursing Assistant

OSHA 10 Healthcare

Course Name: Plumbing & Heating

Grades: 11-12

Prerequisite: N/A

Credits: 3 Electives

Description: Plumbing and Heating offers 2 one-year programs providing instruction in all phases of plumbing and heating technology. The students will learn installation, repair, and maintenance of plumbing and heating equipment.

In the Plumbing year (2024-25), students will learn types of piping and fittings and the tools required for their proper installation. Plumbing installations will be done under slab and in wood frame spaces in and outside our shop. Students will learn about different pumps, tanks and plumbing fixtures and be involved in installation and service of the equipment. Domestic water heating by electricity, gas, oil and solar will be understood.

In the Heating year (2025-26), students will learn the basics of oil and gas heating systems. They will learn to use the tools to maintain, install and troubleshoot heating systems. Boilers and furnaces will be worked on in our lab. Students will be involved in the installation, maintenance, and adjustment of equipment. This will require skills learned in piping, wiring, control circuitry, and sheet metal. Hot air ductwork and hydronic heat distribution units, such as baseboard and radiant, will be installed as zone of heat in our shop. Solar, wood and refrigeration will be explored as heating sources in the trades.

CAPITAL AREA TECHNICAL CENTER

Both courses use a nationally recognized curriculum with a national registry for qualified students. Graduates have basic entry-level skills to enter the workforce or continue their education in Plumbing & Heating at a technical college.

Qualities of a Successful Student

The ability to work well with others
Willingness to learn
Reading and comprehension skills
A strong interest in the trade

Certifications Offered:

National Association of Home Builders Plumbing
National Oil Heat Research Alliance Bronze Course
OSHA 10 hours Construction
NOCTI
JIT for both Plumbing and Heating