

MEDOMAK VALLEY HIGH SCHOOL



PROGRAM OF STUDIES
2014-2015

Medomak Valley High School Program of Studies 2014-2015 Table of Contents

Greetings from the Principal	2
Mission Statement	3
Accreditation Statement	3
Proficiency Based Education	4
Maine Learning Results (MLR)	5
Common Core State Standards (CCSS)	5
Next Generation Science Standards (NGSS)	6
Guiding Principles	6
Graduation Standards	6
Academic Planning	7
Curriculum and Levels	7
Guidance Counselors	8
Graduation Requirements	8
Guidance Department Recommendations	9
Early College Opportunities/External Credits	10
Dual Enrollment –Thomas College	10
High School Aspirations – University of Maine	11
On Course For College – Maine Community College System	11
Medomak Valley’s Advanced Placement Program	12
AP4All	12
Bridge Program with Mid-Coast School of Technology	12
Independent Study	13
Teacher’s Aide Program	13
Community Service Credit	13
Student Achievement Center	14
Virtual High School	14
PLATO	14
Grade Level Determination	14
Determining Grade Point Average (CGPA)	14
Testing Requirements/Options	15
Early Graduation	15
Response To Intervention	15
Special Education	16
Gifted and Talented	16
English	17
Mathematics	25
Science	32
Social Studies	37
World Languages	44
Visual, Performing, Fine and Applied Arts	49
Health and Physical Education	60
Mid-Coast School of Technology - Vocational Education	62

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High School*

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February 2014

Dear MVHS Students and Parents,

The *Medomak Valley High School Program of Studies* has been developed to assist you in planning a productive high school program. Each of our departments has provided you with course descriptions and information designed to guide you in making appropriate choices. Students are asked to examine the material provided in this document very carefully and to discuss it thoroughly with a parent or guardian, teachers, and guidance staff.

Plans should be made for a continuous, coordinated program extending throughout the four years of high school and leading to the goal of further educational preparation for life as a productive and successful citizen. The academic program of Medomak Valley High School is our major focus, and we have a wide range of course offerings including many enriching electives. Our co-curricular program is varied, allowing students to experience a well-rounded education during their high school years. Each student is encouraged to take advantage of the opportunities offered and we encourage students to become involved both in and out of the classroom.

Questions may arise as you review this document, and we are eager to help you understand our programs. Our counseling staff, department academic coordinators, and administrators are available to answer your questions. A phone call or request for a meeting is always welcome.

We extend our best wishes to you for a wonderful and exciting educational experience at Medomak Valley High School.

Sincerely,

Harold E. Wilson
Principal

MEDOMAK VALLEY HIGH SCHOOL MISSION STATEMENT

The mission of Medomak Valley High School, through collaboration with the community and home, is to provide a safe environment where students learn the skills to be effective communicators, confident problem-solvers, and involved citizens who embody sound character. Our expectations for student learning are as follows:

Be a Communicator who:

- Listens for comprehension.
- Demonstrates an ability to communicate effectively.
- Understands the need to be an effective communicator.

Be a Problem Solver who:

- Demonstrates a capacity to understand a problem and uses a variety of methods to solve problems.

Be an Involved Citizen who:

- Participates within a community environment and respects community rules.

ACCREDITATION STATEMENT

The New England Association of Schools and Colleges, Inc., accredits Medomak Valley High School. NEASC is a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering post-graduate instruction.

Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the New England Association is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the status of Medomak Valley's accreditation by the New England Association should be directed to the administrative staff of Medomak Valley High School.

PROFICIENCY BASED EDUCATION

Graduation Diploma Requirements

In May of 2012, the Maine State Legislature passed L.D. 1422 which will change the way Maine public high schools award graduation diplomas. Starting with the graduating class of 2018, all students must show proficiency in each of the eight content areas of the Maine Learning Results and their guiding principles.

The State of Maine Department of Education strictly adheres to the rule of local control when it comes to determining what evidence is required for a student to prove they have demonstrated proficiency in the eight MLR content areas and their guiding principles. Medomak Valley High School has entered an affiliation with the Great Schools Partnership and together we have outlined the content area graduation standards that must be met in order to receive an MHVS diploma. These standards are listed below the course descriptions.

The school has the responsibility of making clear each of the specific content area standards, and guiding principles that must be mastered in order to receive a Medomak Valley diploma. Moreover students must be provided with *multiple pathways* to demonstrate proficiency in each of the content area standards.

Many of our students will be able to demonstrate proficiency in the required MLR content area standards and guiding principles by taking a traditional college preparatory course load similar to the one listed on page 10. However, students will also have the opportunity to demonstrate proficiency in ways other than through a traditional high school program. For example, a student could develop a plan to study how electricity is used in the manufacturing process. Working side-by-side with a technician in a manufacturing facility, some students would be more likely to develop both an interest and better understanding of both the laws of electricity as well as its many uses.

Working in a manufacturing environment could increase students' engagement in the math or science curriculum as they learn about angles, chemical properties and/or stress loads. There are any number of opportunities for students to learn the essential skills that employers claim high school graduates are lacking such as communication, project planning, teamwork, problem solving, and critical thinking.

The process of moving towards a proficiency-based diploma is an evolving one and will include some changes to the way all Maine public high schools operate. For example, each member of the high school teaching staff has attended multiple workshops outlining new teaching strategies designed to improve student learning with standards. In addition, the number of years required to complete high school could vary depending on the specific needs of the student. Medomak Valley High School will stay abreast of any new regulations and we will make every effort to ensure that all of our courses are aligned with any required changes and our students receive the best education possible.

THE MAINE LEARNING RESULTS PARAMETERS FOR ESSENTIAL INSTRUCTION

Maine statute requires that schools provide instruction in eight content areas; English Language Arts, Mathematics, Science, Social Studies, World Languages, Visual and Performing Arts, Health Education & Physical Education, and Career & Education Development*. The Maine Learning Results outline the guiding principles; content areas, content standards and performance indicators that specify what students “should know and be able to do.”

For English language arts and mathematics, Maine has incorporated the Common Core State Standards into its Learning Results. In science, Maine is one of 26 states participating in the development of Next Generation Science Standards and will soon incorporate the NGSS standards into the Maine Learning Results.

To review the 2007 Maine Learning Results, Parameters for Essential Instruction, please visit the following website: <http://www.maine.gov/education/standards.html>

**Career and Education Development Standards are not intended to promote stand-alone courses. Medomak Valley is in the process of carefully reviewing each career and education standard and performance indicators to ensure our curricula offers every opportunity for students to demonstrate proficiency in this critical content area. For additional information on the Maine Learning Results, Career and Education Development Standards, please visit the following website: http://www.maine.gov/education/lres/pei/career_ed102207.pdf*

COMMON CORE STATE STANDARDS

In an effort to increase the rigor of instruction in our nation’s public schools, 45 states including Maine have adopted the internationally recognized Common Core State Standards for Mathematics and English/Language Arts and incorporated them into the Maine Learning Results.

The Common Core State Standards identify the skills and knowledge that students will be required to know for success in college and careers.

To review the Common Core State Standards Initiative, please visit the following website: <http://www.corestandards>.

NEXT GENERATION SCIENCE STANDARDS

In 2007, a Carnegie Foundation commission of distinguished researchers and public and private leaders concluded that "the nation's capacity to innovate for economic growth and the ability of American workers to thrive in the modern workforce depend on a broad foundation of math and science learning, as do our hopes for preserving a vibrant democracy and the promise of social mobility that lie at the heart of the American dream". However, the U.S. system of science and mathematics education is performing far below par and, if left unattended, will leave millions of young Americans unprepared to succeed in a global economy. Some of the reasons cited for improving our nation's science education include:

- Reduction of the United States' competitive economic edge
- Lagging achievement of U.S. students
- Essential preparation for all careers in the modern workforce
- Scientific and technological literacy for an educated society

For the data that supports the above statements and additional information on the Next Generation Science Standards please visit the following website: <http://www.nextgenscience.org>

Medomak Valley has aligned our science curriculum to reflect both the MLR and the NGSS.

GUIDING PRINCIPLES

The knowledge and skills described in the Maine DOE Regulation 132 support Maine students in achieving the goals established in Maine's Guiding Principles. Each student must leave school as:

1. A clear and effective communicator.
2. A self-directed lifelong learner.
3. A creative and practical problem solver
4. A responsible involved citizen.
5. An integrative and informed thinker.

For additional information on Maine's Guiding Principles, please visit the following website: <http://www.maine.gov/education/standards.html>

GRADUATION STANDARDS

The Great Schools Partnership in conjunction with the Maine Department of Education has developed a list of sample graduation standards for each of the MLR's eight content areas. Each content area provides between five and eight graduation standards along with a number of performance indicators for each standard. MVHS is working to determine which specific performance indicators students will need to demonstrate proficiency in order to meet the standard. Students graduating in the class of 2018 and beyond will be required to demonstrate proficiency in each of the eight content areas, the guiding principles, and earn the required credits as determined by the school board. For more information on the sample graduation standards, please visit the following website:

<http://www.maine.gov/doe/proficiency/standards/sample-graduation.html>

ACADEMIC PLANNING

One of the most important goals for the Medomak Valley High School administration, teachers and guidance counselors is to assist all students in reaching their potential. In order to ensure academic success, it is essential for students to involve parent(s) or a guardian, the guidance counselor, and teachers to help select courses that are of interest and meet graduation requirements.

Students are encouraged to develop a four-year educational plan based on their future goals such as a two or four year college, vocational training, or the military. The purpose of the plan is to link student interests to course selections and to establish a focus and direction while providing flexibility if the student's educational goals change. Parents/Guardians are encouraged to review the plan along with their student and guidance counselor to ensure the student is taking the appropriate courses to meet their stated educational goals.

In ninth grade, students are informed of the graduation requirements, encouraged to enroll in rigorous courses, and the importance of developing and maintaining good study habits. During the tenth grade year, the number of credits earned is reviewed with each student along with academic performance to date. The academic plan is reviewed and updated based on the student's progress. If the student's future educational goals have changed the plan is updated to reflect need changes. During eleventh and twelfth grade, credits earned are reviewed to ensure each student is on track for meeting graduation requirements and for meeting their post-graduation educational goals. Students are encouraged to continue taking rigorous courses throughout their senior year to be prepared for their next step after high school.

Past academic performance and data from standardized tests such as the NWEA, PSAT, and SAT are also helpful in program planning. The guidance counselors are available at the high school for consultation with parents and students. Call 832-7270 if you have questions or if you would like to set up an appointment with a counselor.

CURRICULUM

The program of studies at Medomak Valley High School and Mid Coast School of Technology offers a comprehensive curriculum of over 100 courses within 7 disciplines. Courses are offered beginning at the college prep technical through the advanced placement and college level.

Academics are our primary focus. Therefore, we offer several levels of academic classes to fit the needs of all students.

COLLEGE PREP (CP)

This is the minimum level of course work that a four-year university or college will accept for entry directly out of high school.

HONORS (H)

This level is offered in the 9th - 12th grade and includes the broadest and deepest level of study combined with a much faster pace. Students are expected to be self-motivated, responsible, and committed to academics. Honors courses come with a weighted grade point average as an incentive and reward to students. This is the preferred level of academics for four-year college / university entrance directly out of high school.

DUAL ENROLLMENT (COLLEGE LEVEL)

Dual enrollment courses are college courses taught on the MVHS campus by MVHS Teachers. These are rigorous courses that require students to be self-motivated and disciplined enough to adhere to deadlines. Dual enrollment courses offer junior and senior level students, with a 2.5 CGPA, and instructor permission the opportunity to earn both high school credit and college credit at the same time. Many of these courses will transfer directly to the student's college of choice, prepare the student for upper level college courses and provide substantial financial savings, as they are often free or the cost is substantially reduced. Dual enrollment courses come with a weighted grade point average as an incentive and reward to students.

ADVANCED PLACEMENT (AP)

AP courses are as demanding as dual enrollment courses and often more so. AP courses are college level courses taught in high school. Both teachers and their curriculum are approved and oversee by The College Board (www.collegeboard.com). AP courses are both highly rigorous, and demanding, as they follow a strict curriculum to prepare students to take national exams in May (in the specific subject area). Students must take the AP exam in the subject area in order to have the AP designation on their high school transcript. Students must have a 2.5 CGPA, and instructor permission to enroll.

Is it better to take Honors and AP courses, and get average grades, or take College Prep courses and get better grades?

It is always better to take courses that are appropriately challenging. If the student feels that College Prep classes are challenging and that he/she can achieve A's in these courses, the student should take College Prep classes. However, if the student is willing to work extra hard in Honors Dual Enrollment, and AP courses and can still achieve high grades, the student should challenge him/herself and take them.

GUIDANCE COUNSELORS

COUNSELOR

TBD

Ms. Deb Duncan

Ms. Kara DeCato – Director of Guidance

Mrs. Linda Anderson

STUDENTS SERVED:

Students A-G

Students H-P

Students Q-Z

School-to-Career Coordinator

GRADUATION REQUIREMENTS*

To graduate from Medomak Valley High School in the class of 2015 through 2017, the student must complete a course of study to acquire a minimum of 24 credits (1 credit equals one year of instruction) that includes successful completion of the following required courses:

English: 4 credits

Mathematics: 4 credits, including Algebra I

Social Studies: 3 credits, including World History (1 credit), U.S. History (1 credit) and Economics (1/2 credit) and Government (1/2 credit)

Science: 3 credits, including Freshmen Physical Science (1 credit) Life Science (Biology) (1 credit), and Physical Science (Chemistry or Physics) (1 credit)

Health: 1/2 credit

Physical

Education: 1 credit

Fine Arts: 1 credit

The above represents 16.5 of the 24 credits necessary to graduate.

*The Graduation Requirements policy is currently under revision. (Students graduating in the class of 2018 and beyond will be required to earn 24 credits, but the content area requirements are still under review).

For students with an Individualized Education Plan or 504 Plan, the IEP or 504 Plan will address how diploma requirements will be met.

GUIDANCE DEPARTMENT RECOMMENDED FOUR-YEAR PLANS

We strongly encourage students and their parents to make appointments with guidance counselors to develop four-year plans for coursework. Careful planning will ensure that students enroll in the courses required by two-year colleges, technical schools, employment, and four-year colleges.

Sample career pathways available to MVHS students:

1. Students interested in pursuing studies at a two-year technical schools, community colleges and/or employment should consider a course of study that includes the following college prep classes:

4 years English

4 years math

3 years science including 2 lab sciences

3 years social studies

2. Students interested in pursuing studies at a four-year college and being considered for honors programs, should consider a course of study that includes the following college prep classes (Honors, Advanced Placement or Dual Enrollment recommended when available):

4 years English

4 years math

4 years science including 3 lab sciences

3-4 years foreign language - 2-year minimum of the same language (taken in consecutive years)

4 years social studies

PROFICIENCY BASED DIPLOMA – TRADITIONAL PATHWAY

An example of a traditional course pathway for students to demonstrate proficiency in all eight MLR content area graduation standards, and their guiding principles (for the graduating class of 2018 and beyond):

English Language Arts - 4 years

English I CP, English II CP, English III CP, English IV CP

World Languages 1-2 years

French or Spanish I and II

Mathematics – 4 years

Algebra I CP, Geometry CP, Algebra II CP, Statistics CP* and Quantitative Analysis CP*

Science – 4 years

Physical Science CP, Biology CP, Chemistry CP, Physics CP

Social Studies – 3 years

World History CP, U.S. History CP, Government CP*, Economics CP*

Physical Education 1 year

Physical Education*, Lifelong Wellness*

Health – ½ year

Health*

Visual and Performing Arts - 1 year

Various

* Indicates a half year course

ALL STUDENTS MUST CARRY A MINIMUM OF 6 CREDITS IN THEIR SCHEDULES

EARLY COLLEGE OPPORTUNITIES EXTERNAL CREDITS

The 24 credits required for graduation can include college or external credits earned. In order to provide students with multiple pathways to success in demonstrating mastery of the standards, the principal may award credit for work completed outside the traditional classroom. The student must apply to the principal in advance for approval of any outside college or external credits.

Each of the opportunities listed below requires a separate application and a letter of recommendation from a student's guidance counselor. Other specific requirements are listed for each program. In some cases students are responsible for purchasing books and supplies. Applications can be picked up in guidance.

DUAL ENROLLMENT THOMAS COLLEGE

Medomak Valley High School has entered into a partnership with Thomas College that allows high school juniors and seniors with at least a 2.5 Cumulative Grade Point Average (CGPA) who have permission of the instructor, to enroll in college courses for credit prior to high school graduation. College credits earned through dual enrollment can be simultaneously applied toward high school and college graduation and can be transferred to other colleges or universities. These courses are taken at Medomak Valley High School, taught by MVHS teachers (who have been approved as adjunct Thomas College instructors) and are free. There are no costs for books and no fees. These courses are weighted and figured into the GPA calculation.

HIGH SCHOOL ASPIRATIONS TUITION WAIVER PROGRAM **UNIVERSITY OF MAINE**

The University of Maine System and the State of Maine designed the High School Aspirations Incentive Program to raise the educational aspirations of Maine students by offering them the opportunity to register for college courses at reduced tuition rates. Currently, UMA and the Department of Education have made it possible for qualifying students to take up to six credits per semester tuition free. There may still be fees and associated book costs that must be paid by the student.

To qualify for the program, students must:

- Be a high school junior or senior
- Be a Maine resident
- Have at least a “B” grade point average, or a written recommendation from high school guidance
- Have permission from their high school or Adult Education program
- If under 18, have the consent of their parents or guardians
- Meet course prerequisites
- Provide recent SAT scores or take the university Accuplacer test

Courses are taught at the University of Maine (Orono), University of Maine (Augusta) and the University College in Rockland. For additional information on the aspirations tuition waiver program please see the following website:

<http://learn.maine.edu/rockland/get-started/high-school-aspirations/>

ON COURSE FOR COLLEGE **MAINE COMMUNITY COLLEGE SYSTEM**

The On Course for College Program is a fall and spring semester academic enrichment program for qualified high school juniors in their spring term and seniors to enroll in college courses at Central Maine Community College (CMCC). CMCC will waive the cost of tuition; the applicant is responsible for paying only fees and the cost of textbook(s) for the selected course(s). Students are allowed to take one or two courses (3 to 6 credits) per academic year; this program is not available during the summer session. The program is intended to provide students with the opportunity to supplement but not detract from their high school progress. Awarding high school credit for college work is at the discretion of the student’s high school. For additional information on the On Course for College Program, please visit the following website:

<http://www.cmcc.edu/FutureStudents/HIGHSCHOOLTOCOLLEGEPARTNERSHIPS.aspx#.UsbomBZRHdk>

MEDOMAK VALLEY'S ADVANCED PLACEMENT PROGRAM

Medomak Valley has several options in the College Board Advanced Placement (AP) program. Offerings include AP United States History, AP Microeconomics, AP Macroeconomics, AP Human Geography, AP U.S. Government and Politics, AP English Literature and Composition, AP English Language and Composition, AP Calculus AB, AP Biology, AP Physics, AP Studio Art and a variety of online AP classes offered through Virtual High School.

The Advanced Placement program is designed to challenge students beyond the regular secondary level curriculum. Students who take an AP course are required to take the course AP exam in May, and those who score well on these exams may receive college credit for their work. These courses require a strong commitment on the part of the student to work independently outside the classroom, a 2.5 CGPA and the permission of the instructor. For additional information about the College Board's Advanced Placement Program, please visit the following website: <https://apstudent.collegeboard.org/home>

AP4ALL

AP4ALL is offered by the Maine Department of Education to provide online Advanced Placement courses free of charge to any student residing in a Maine school administrative unit who is educated at the public expense. By offering AP courses online at no charge, AP4ALL provides equity of access to rigorous and challenging coursework for all Maine public high school students regardless of where they live, or the limits of resources available in their local school. In 2013-14, AP4ALL will be offering 23 online Advanced Placement courses, and registration for those courses began in March 2013. For more information about AP4ALL, and specifically about the student registration process, please go to: <http://www.ap4all.org>.

BRIDGE PROGRAM WITH MIDCOAST SCHOOL OF TECHNOLOGY

The Bridge Program is a partnership between Medomak Valley High School, Mid Coast School of Technology and the University of Maine, Orono. Up to 20 students will be selected in their sophomore year to participate as juniors and seniors. These students will be taking courses in Math, English, Science and Social Studies at MVHS that will count toward high school graduation and as much as one full year of college. Accepted students must also be enrolled in a Career and Technical Program of their choice at MCST. There is a modest cost for the college credits. However, scholarships will be offered through a "needs based" application process. The Bridge Program provides an excellent opportunity for MVHS students to acquire a year of college credits while they complete high school with their peers.

Student selection will be based on the student's application, potential for success, and commitment to the program. For the 2014-15 school year MVHS will be offering the following four Bridge Program courses, MES 101-Introduction to Maine Studies, CHY 101 Chemistry for Everyday Living, MAT 103-Elementary Algebraic Models in Our World, and ENG 100-College Composition Stretch, Part I. Please see the appropriate department for a full description of each course.

In addition to the Bridge Program, the Mid Coast School of Technology has a number of articulation/dual enrollment agreements with Maine colleges that allow students to receive college credit for courses/work completed in high school. Please see the MCST Program of Studies supplement to this document, located at the end of this program.

In addition to the above listed early college options, there are a number of other early college options available to Maine students. For additional information, please visit the following website: <http://www.maine.gov/doe/earlycollege/programs.html>

INDEPENDENT STUDY

Independent study is designed for students who have demonstrated an ability to work independently and who are self-directed and responsible. Interested students need to begin the process by completing an application from the department where the independent study will occur. Once approved by the guidance counselor, the completed application should be submitted to the principal for final approval. **No student may carry more than one independent study per semester. No teacher may supervise more than two independent study students per semester.**

TEACHER'S AIDE PROGRAM

Students who wish to be considered for a teacher's aide position for credit must complete an application developed with the teacher who will sponsor and supervise their work. Only juniors and seniors are eligible to participate in the program. Different criteria are expected in different content areas and are available through each department. The principal must approve all aide applications. **Teachers will be limited to no more than one aide each school year.**

All aide positions will carry a maximum of 1/2 credit for a full year's work. These will be graded on a Pass/Fail basis; the grade does not count toward the GPA, but does count as an elective credit toward graduation requirements.

COMMUNITY SERVICE CREDIT

Students have the option of receiving 1/2 credit for 45 hours of community service (or 1 credit for 90 hours) with prior approval from the Principal.

Community Service includes volunteer work for any non-profit organization or any volunteer work for the disabled or a temporarily ill person. The point of community service is to help an individual or an organization that needs the help or who physically cannot do the task.

Examples of Community Service:

- Volunteering at a local soup kitchen.
- Volunteer at a local hospital like Pen Bay or Miles Memorial.
- Volunteer at a local animal shelter.
- Volunteer at the Union Fair, Windsor Fair, Lobster Festival or similar organization.
- Help tutor an elementary student.
- Volunteer at a local nursing home.
- Volunteer for any food or bottle drive for a non-profit cause.
- Volunteer at one of the local Recreation Departments or YMCA.
- Helping an elderly neighbor with lawn mowing, shoveling snow, etc.
- Helping with maintenance at the high school (example: cleaning, painting, stacking chairs, picking up trash)
- Volunteer for any local election (town, state, national).

These are examples of a few acceptable community service activities. As a general rule, helping family and/or friends, although an important and valuable endeavor, is *not* considered community service. There is a wide range of opportunities for community service credit and students are encouraged to discuss their ideas with their guidance counselor and the building principal.

STUDENT ACHIEVEMENT CENTER

The MVHS Student Achievement Center offers academic support and enrichment in a variety of subject areas, primarily through online learning. The MVHS Student Achievement Center Coordinator monitors all PLATO and VHS courses regularly.

VIRTUAL HIGH SCHOOL (VHS)

Virtual High School (VHS) is a non-profit cooperative of more than 400 partner schools throughout the world that use online courses to expand learning opportunities for students. VHS offers students-centered that are designed and delivered to promote a high quality, collaborative learning environment. VHS classes are standards based and taught by highly qualified faculty. Courses follow a semester schedule, and assignments are due at specified weekly intervals.

PLATO (EDMENTUM)

Many students who have difficulty completing a course end up with a failing grade. Rather than take the entire course over PLATO credit recovery courses give those students who meet the requirements, the opportunity to get credit by only completing, or meeting the standards in those areas they had previously been unable to demonstrate proficiency. Students can access credit recovery and online tutorials with self-paced PLATO educational software. PLATO learning addresses those students with an online; standards based interactive learning experience including media, graphics and video.

GRADE LEVEL DETERMINATION

Grade level status will be assigned based on earned credit. To become a sophomore, a student needs 6 credits, a junior needs 12 credits, and a senior needs 18 credits.

DETERMINING GPA (POLICY IKSC-UNDER REVIEW)*

For the purposes of calculating weighted grade point averages, one year (two semesters) honors or AP courses will be awarded one additional grade point for that course and one-half year (one semester) honors or AP courses will be awarded one-half (0.5) additional grade points for that course. An additional grade point will be awarded for all full year college level (100 and above) classes with prior approval of the high school principal.

***The Determining GPA Policy is currently under review**

TESTING REQUIREMENTS AND OPTIONS

First, second and third year MVHS students are required to complete a variety of standardized tests throughout high school. These measures are utilized to better understand students' strengths, identify areas of improvement, and to assess the adequate yearly progress of students. The following assessments are administered at Medomak Valley High School:

A. All first and second year students: **NWEA** - Measures of Academic Progress Students are assessed in reading and math during the fall and spring of each year.

B. All second and third year students: **PSAT**- This exam is offered by the College Board as a practice SAT. The test will be administered in October. Students receive scores in critical reading, mathematics and writing.

C. All third year students: **SAT** - This exam is offered by the College Board, and required by the Maine Department of Education in order to assess the adequate yearly progress of students attending public high schools in Maine. All third year students are required to take the SAT in May. All third year students will also complete the science and technology augmentation tests required by the state of Maine and administered during the spring of the student's third year. May 2014 currently marks the last year the SAT will be used for MSHA accountability purposes. Starting in 2015 third year students will be required to take the Smarter Balanced Assessment.

D. **Advanced Placement Exams (AP)** - These exams are offered by the College Board, Advanced Placement examinations are administered at MVHS in May each year. Many colleges will award college credit to students who earn a score of 3, 4, or 5 on the AP exam. The fee for each AP exam is paid for by RSU#40 and all students that enroll in an AP course will be required to take the corresponding AP exam. All exams will be taken at school during the school day.

EARLY GRADUATION (MSAD #40 BOARD POLICY: IKF SECTION C)

A student may work with guidance to develop a plan to complete graduation requirements in fewer than four years. Early graduation plans should be proposed by September 1 of the school year the early graduation is expected. The principal must approve all early graduation plans.

RESPONSE TO INTERVENTION (RTI)

RTI provides a framework in which schools can deliver early intervening services. It is a systematic prevention approach, the foundation of which is quality core instruction within the general education classroom. RTI processes focus on how well students respond to changes in instruction or "interventions." Supplementary supports and interventions, both academic and behavioral, are provided to struggling students based on data collection and analysis. These supports and interventions vary in intensity based on student need, and will be provided by a variety of personnel, working collaboratively with general education and special education teachers. RTI has multiple tiers for a step-by-step approach to problem solving. It is highly personalized for each student.

SPECIAL EDUCATION

The special education department offers a variety of services ranging from individualized tutoring to small group instruction. In order for a student to be eligible for such services, he/she must be referred to and identified as eligible by the MVHS Individualized Education Plan (I.E.P.) Team. Eligibility involves documenting that the student qualifies as having one or more disabilities as defined by state and federal regulations. A referral is generally made through the guidance department to the special education department. A student, teacher, parent, counselor, or administrator may initiate this process at any time, preferably no later than a student's junior year.

MVHS embraces the inclusion model for special education services. A student's Individualized Education Plan (I.E.P.) specifies whether the student will have direct instruction or consultation services. Small group classes, directed study, and assistance with regular classroom assignments are also available as determined by the IEP Team. Students or parents seeking more information about special education offerings should contact a guidance counselor, administrator, the special education coordinator or teacher.

GIFTED AND TALENTED (GT)

The RSU 40 School district makes every effort to systematically identify, select, and support students with exceptional abilities or potential in the areas of advanced intellectual skills, specific ability and/or aptitude, musical, artistic and/or other creative endeavors, in accordance with Maine law.

We believe that gifted and talented students often have unique academic and social needs, and as such our teachers, administrators and guidance counselors support a philosophy that acknowledges the needs of this particular population. In addition, MVHS has on staff, Ms. Jennifer Goode, a gifted and talented coordinator/teacher who works as an advocate and advisor for these students. The coordinator will help each GT student develop a plan that seeks to maximize the student's potential in specific areas of interest including access to all Honors, Dual Enrollment and AP courses. If a GT student needs accelerated programming in one or more areas, Ms. Goode will advise the student as how best to proceed. If you require additional information please call the school's guidance department.

ENGLISH

Medomak Valley High School's English Department's mission is to prepare our students to live meaningful lives as productive and literate citizens by improving their abilities to think, read, write and speak effectively across a range of genre and for a variety of purposes and audiences. To realize this mission, the department offers a rigorous and relevant curriculum that provides students with multiple and varied opportunities to read, analyze and critique quality texts, develop the processes, traits and craft of writing. Students will engage in individual and collaborative inquiry into the habits of effective readers and writers and the elements of quality texts as well as discussion skills and formal public speaking for a variety of audiences through oral presentations and the practice of effective speech delivery techniques. Students are required to complete four credits in English.

Below is a link to Maine's ELA Common Core Standards for grades 6-12:

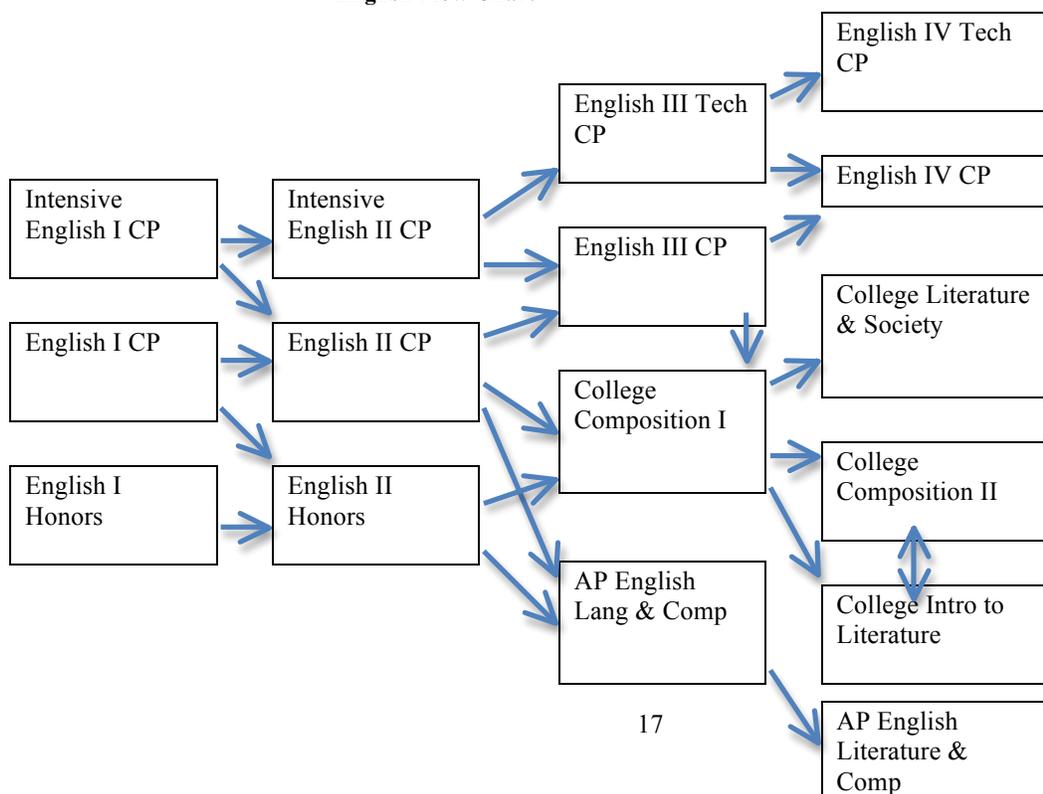
<http://www.maine.gov/doe/ela/>

Starting with the graduating class of 2018 all students must demonstrate proficiency in the following English Language Arts Graduation Standards:

1. Reading Comprehension
2. Reading Interpretation
3. Writing Arguments
4. Writing Informative and Narrative Texts
5. Writing Process
6. Writing Research
7. Speaking and Listening Discussion
8. Speaking and Listening Presentation

For additional information on the English Language Arts Graduation Standards please visit the following website: <http://www.maine.gov/doe/proficiency/standards/ela.pdf>

English Flow Chart



Intensive English I CP

Full year: 2 credits (one English credit, one elective credit)

Recommended year: grade 9

Intensive English I CP meets every day. The course provides an intensive focus on a variety of skills to help students become better readers and writers. Grammar, vocabulary, paragraph structure, crafting an essay, organizational skills, and study skills are stressed. Research skills are introduced, including in-text citations and MLA works cited entries. Oral participation and collaboration with peers is expected; listening components are integral to the class throughout the year. Self-reflection and self-assessment are encouraged.

English I CP

Full year: 1 credit

Recommended year: grade 9

English I CP meets every other day. Active reading in a variety of genres is emphasized; self-direction and self-motivation are fostered. The course focuses on a variety of skills to help students become better readers and writers. Grammar, vocabulary, paragraph structure, crafting an essay, organizational skills, and study skills are stressed. Research skills are introduced, including in-text citations and MLA works cited entries. Oral participation and collaboration with peers is expected; listening components are integral to the class throughout the year. Self-reflection and self-assessment are encouraged.

English I Honors

Full year: 1 credit

Recommended year: grade 9

The topics addressed in English I CP are also addressed in English I Honors but at a faster pace and in greater depth. Students read a variety of genres independently as a foundation for class discussion and written response. Students are required to write complex responses to assignments and to hone the craft of writing. Self-reflection and self-assessment are expected.

Intensive English II CP

Prerequisite: Intensive English I, or English I

Full year: 2 credits (one English credit, one elective credit)

Recommended year: grade 10

Intensive English II will meet every day for a whole period. This course will provide an intensive focus on developing the skills of writing, reading, listening and speaking. Active reading of multicultural literature for identification, analysis, and demonstration of understanding of the defining features of literary texts is emphasized. The writing component emphasizes expository and analytical writing skills including journal writing, prewriting, and refining the five-paragraph essay (including multiple drafts) for a variety of purposes including informing, analyzing and persuading. Further application of the research process includes evaluating information for accuracy and possible bias.

English II CP

Prerequisite: English I

Full year: 1 credit

Recommended year: grade 10

English II CP focuses on further developing the skills of writing, reading, listening and speaking. Active reading of multicultural literature for identification, analysis, and demonstration of understanding of the defining features of literary texts is emphasized. The writing component emphasizes expository and analytical writing skills including journal writing, prewriting, and refining the five-paragraph essay (including multiple drafts) for a variety of purposes including informing, analyzing and persuading. Further application of the research process includes evaluating information for accuracy and possible bias.

English II Honors

Prerequisite: English I, 2.5 CGPA

Full year: 1 credit

Recommended year: grade 10

The topics addressed in English II CP are also addressed in English II Honors but at a faster pace and in greater depth.

English III Technical CP

Prerequisite: English II, and permission of the instructor.

Full year: 1 credit

Recommended year: grade 11

This course emphasizes reading comprehension and analysis of American Literature using adaptive materials when necessary to ensure student progress and success. Special attention is given to organization, vocabulary, and the development of constructed responses to literary topics. A particular focus on persuasive writing involves students in writing that is conscious of audience, clarity, and precision using the steps of the writing process. Technology is integrated with a variety of expectations, which may include online submission of assignments and multi-media presentations.

English III CP

Prerequisite: English II

Full year: 1 credit

Recommended year: grade 11

This course stresses college preparatory level reading, writing, discussions, oral interpretations, and presentations. Students study history and cultural trends in American literature. Essay writing will continue to develop the fundamentals of clear, concise, and persuasive writing. Special attention will be given to organization, vocabulary, and the development of open-ended responses in writing. Projects will be an integral part of the course. Oral presentations will be required, as will author and position papers.

College Composition Stretch, Part I – ENG 100

Prerequisite: Student must be a member of the Bridge Program.

Full year: 1 MVHS credit, 3 University of Maine credits.

Recommended year: grade 11. Grade 12 for students graduating in 2015.

This course provides intense practice with habits of reading, writing, thinking, and revising essential to postsecondary academic work. Designed for students who want to create a strong foundation for themselves in academic reading and writing. Students who complete ENG 100 move on to ENG 106 the following year. Students will not earn credit or grades for completing both ENG 101 (not offered at MVHS) and either course in the College Composition Stretch Sequence, ENG 100 and ENG 106.

General Education Requirements: Students must complete both ENG 100 and ENG 106 with a minimum grade of C or better in each course to satisfy the university of Maine General Education College Composition requirement. Neither course taken alone will satisfy this requirement.

Advanced Placement English Language and Composition

Prerequisite: English II, 2.5 CGPA, and permission of the instructor.

Full year: 1 MVHS credit.

Recommended year: grade 11

This course is offered for students seeking college English credit through the AP program **while in their junior year**. Its intent is to engage students in becoming skilled readers of non-fiction written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Students become practiced in their awareness of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing across the disciplines. Students are required to take the College Board AP English Language and Composition Exam in the spring.

College Composition I – Dual Enrollment

Prerequisite: English II, Junior or Senior Status, 2.5 CGPA, and permission of the instructor.

One semester: ½ MVHS credit and 3 Thomas College credits

Recommended year: grade 11

Students explore topics of interest (reading and writing non-fiction) as they work on organization and development, strong sentences, appropriate diction, elimination of errors, audience, and the writing process. Student writing should demonstrate strong organization and unity, including effective thesis statements, topic sentences, and coherence, effective development of paragraphs and essays through ideas, examples, details, narrative, figurative language, and rhetorical devices. Students will be able to write clear, concise, and unified sentences of varying length, style, and structure and use diction that is precise and appropriate (especially in its level of formality or informality) for the essay. Students will be expected to continue to develop a clear sense of audience and purpose, an understanding of writing styles through substantial readings, the application of the steps of the writing process, including generating ideas, composing, editing, and revising. (Thomas College Course Number - EH111)

College Composition II – Dual Enrollment

Prerequisite: College Composition I (EH111), Junior or Senior Status, 2.5 CGPA, and permission of the instructor.

One semester: ½ MVHS credit and 3 Thomas College credits

Recommended year: grade 12

Students continue to explore topics of interest (reading and writing non-fiction) and work on CCI skills while focusing on the research process and research-paper writing, argumentation, analysis, and ethical use of information, being guided by the Association of College and Research Libraries standards. Student writing should demonstrate knowledge of the research process, including the abilities to: -Develop a tentative thesis and outline through thinking and initial research -Determine the extent and kinds of information needed -Develop a research strategy - Effectively locate and access credible sources (print and electronic) -Evaluate information and its sources critically. In addition, students will -Select and integrate information that serves the paper's purpose, and gain knowledge of the process of writing a paper supported by research, including the abilities to paraphrase, summarize, synthesize, quote, cite facts, and properly document sources (MLA format and alternative formats). Students are expected to develop an understanding of the ethical use of information, develop effective argumentation skills, and demonstrate effective analytical skills. (Thomas College Course Number - EH112)

College Introduction to Literature - Dual Enrollment

Prerequisite: College Composition I (EH111), Junior or Senior Status, 2.5 CGPA, and permission of the instructor. (Will not be offered until the 2015-16 School Year)

One semester: ½ MVHS credit and 3 Thomas College credits

Recommended year: grade 11 or 12.

This course is the second half of a full year MVHS English requirement and will follow either College Composition I or II. This course introduces three basic types of literature: fiction, drama, and poetry. The course helps students develop an appreciation of literature with the aim of preparing them to read and enjoy a variety of literary works throughout their adult lives. A wide range of authors and time periods are examined with an emphasis on American literature. (Thomas College Course Number - EH221)

College Literature and Society - Dual Enrollment

Prerequisite: College Composition I (EH111), Junior or Senior Status, 2.5 CGPA, and permission of the instructor. (Will not be offered until the 2015-16 School Year)

One semester: ½ MVHS credit and 3 Thomas College credits

Recommended year: grade 11 or 12

This course is the second half of a full year MVHS English requirement and will follow either College Composition I or II. This course explores the valuable contributions that imaginative writers have made to the improvement of societal values, rules, roles, and behaviors. Students consider the literary perspective on such topics as individualism versus conformity, the struggle for social justice, personal freedom versus civil duty, obedience to authority versus rebellion, and the influence of the environment on the developing self. Such socially conscious authors as Upton Sinclair, Henrik Ibsen, Emile Zola, Ayn Rand, Richard Wright, and Marge Piercy are considered. In this course, students will work toward the following objectives: Recognition of the valuable contributions the imaginative minds of authors can make to the improvement of societal values, rules, roles, and behaviors. Recognition of the historical role literature has played in motivating social reform. This course recognizes literature's role in the exploration of the dynamic relationship between social groups and between the individual and society. There will be a continued development of reading, writing, and public-speaking skills. (Thomas College Course Number - EH222)

English IV Technical CP

Prerequisite: English III, and permission of the instructor.

Full year: 1 credit

Recommended year: grade 11

This course emphasizes reading comprehension and analysis of British Literature using adaptive materials when necessary to ensure student progress and success. Special attention is given to the eras of English literature and culture through representative literary works. Writing effectively for a variety of audiences and purposes is a focus with emphasis on clear thesis statements, organizing and developing ideas, and revising and editing. Technology is integrated with a variety of expectations, which may include online submission of assignments and multi-media presentations.

English IV CP

Prerequisite: English III

Full year: 1 credit

Recommended year: grade 12

This course stresses preparation for college level literacy in reading, writing, class discussion, oral interpretation, and group presentations. Students learn the six eras of English literature and culture through representative novels, short stories, poetry, drama, and essays. Emphasis is placed on analysis and annotation of texts. Students write effectively for a variety of audiences and purposes with emphasis on the well-constructed literary essay, research paper, business letter, and college resume. Mastery of writing clear thesis statements, organizing and developing ideas, and revising and editing are emphasized. Students are responsible for integrating technology into their projects and presentations. Throughout the year students continue to develop collaborative work strategies and time management skills required for college level study.

Advanced Placement English Literature and Composition

Prerequisite: English III, or Comp I and Comp II, Junior or Senior Status, 2.5 CGPA, and permission of the instructor.

Full year: 1 credit

Recommended year: grade 12

This course is offered for students seeking college English credit **while in their senior year** through the AP program. This is a highly concentrated level of study in effective writing, critical reading, and creative interpretation through individual and group projects. The required work is studied in a seminar setting and demands an attentive analysis of a variety of texts and a range of writing tasks. Students are required to take the College Board AP Literature and Composition exam, which is offered in the spring.

Intensive English I CP, English I CP, English I Honors, Intensive English II CP, English II CP, English II Honors, English III Technical CP, English III CP, College Composition I + II, College Introduction to Literature, College Literature and Society, Advanced Placement English Language and Composition, English IV Technical CP, English IV CP, and Advanced Placement English Literature and Composition provide students with the opportunity to demonstrate proficiency in the following English Language Arts Graduation Standards:

1. Reading Comprehension
2. Reading Interpretation
3. Writing Arguments
4. Writing Informative and Narrative Texts
5. Writing Process
6. Writing Research
7. Speaking and Listening Discussion
8. Speaking and Listening Presentation

Interpretive Communication - American Sign Language

One semester: 1/2 credit

Recommended year: grades 10-12

The focus of this course is an introduction to American Sign Language (ASL). ASL grammar, development of a signing environment, and a cross-culture communication is stressed. Active participation in vocabulary acquisition and basic conversation is expected. Opportunities for experiences in the deaf community are offered when available. An effort is made to provide awareness of career opportunities in the fields of ASL interpreting and advocacy for the deaf community. Researching and reporting on some topics related to the history and use of ASL or aspects of deaf culture is expected.

Interpretive Communication provides students with the opportunity to demonstrate proficiency in the following World Language Graduation Standards:

Interpersonal Communication
Interpretive Communication
Presentational Communication
Comparison of Practices, Products and Perspectives
Communities

Creative Writing

One semester: 1/2 credit

Recommended year: grades 10-12

Through the process of draft writing, proofreading, editing, and peer-editing, students will work to develop their skills as writers and create a body of polished work in a variety of genres including poetry, short story, non-fiction, memoir, and play-writing. Students will spend a portion of the class analyzing short works from a variety of authors in order to gain inspiration and improve their craft. Assignments target such skills as creating a purpose, introducing conflict, developing a character, setting a mood, and establishing a voice. The class is conducted in a seminar format in which the involvement of each student is crucial to the group.

Creative Writing provides students with the opportunity to demonstrate proficiency in the following English Language Arts Graduation Standards:

5. Writing Process

SAT Prep

One semester: ½ credit

Recommended year: grades 10-12

Students in this class will learn proven SAT testing strategies and vocabulary, as well as the format, scoring, and content of the test. Most importantly, the course involves going over a large amount of practice SAT material, which will predict and maximize student scores. Students will use the SAT Online Course. The class will help any student prepare for the SAT and improve their test score.

MATHEMATICS

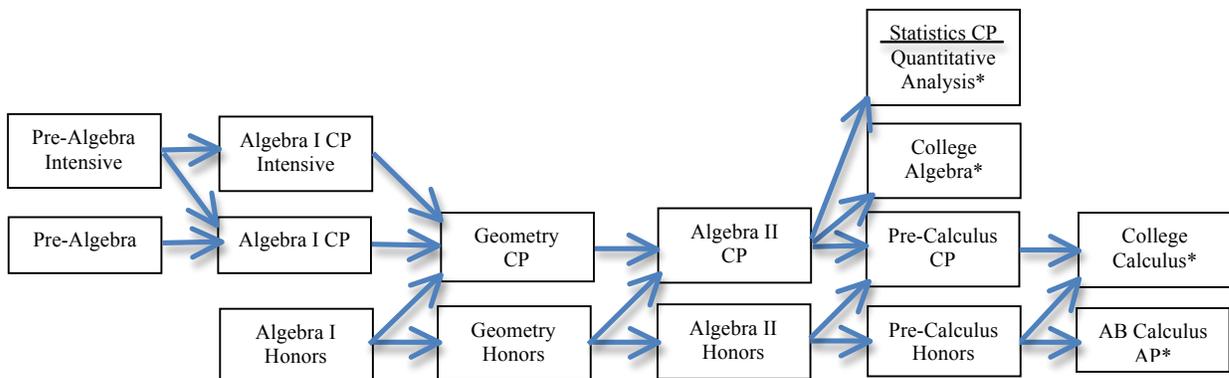
Critical thinking, analyzing, reasoning, problem solving, modeling, and communication are essential skills that are developed through the study of mathematics at the secondary level. Whether plans for the future lead toward a four-year college, a two-year college, or directly to the world of work, a strong foundation in mathematics is crucial to achieving these goals. Students are encouraged to take challenging math classes to expand their understanding of this important subject area. Students are required to complete four credits of math. For additional information on the mathematics CCSS please visit the following website: <http://www.corestandards.org/math>

Starting with the graduating class of 2018 all students must demonstrate proficiency in the following Mathematics Graduation Standards:

- 1. Number and Quantity**
- 2. Algebra**
- 3. Functions**
- 4. Geometry**
- 5. Statistics & Probability**

For additional information on the Mathematics Graduation Standards please visit the following website: <http://www.maine.gov/doe/proficiency/standards/mathematics.pdf>

Math Flow Chart



*Denotes Thomas College Dual Enrollment course.

Intensive Pre-Algebra

Full year: 2 credits (one math credit and one elective credit)

Recommended year: grade 9

Intensive Pre-Algebra will meet every day for a whole period. The course will provide an intensive focus on a variety of skills that will prepare and reinforce needed skills for progression to Algebra I, Geometry, and Algebra II. Organization and study skills will be stressed. All assignments are completed during class time. Math topics will include: tools for Algebra and Geometry, integers, one-step equations and inequalities, factors and fractions, addition and subtraction of rationals, multiplication and division of rationals, multi-step equations and inequalities, functions and graphing, ratio, proportion and percent, statistics and probability, applied geometry and right triangles.

Pre-Algebra

Full year: 1 credit

Recommended year: grade 9

Pre-Algebra is an integrated math that prepares students to continue to Algebra I, Geometry, Algebra II, and/or Precalculus. Math topics will include: tools for Algebra and Geometry, integers, one-step equations and inequalities, factors and fractions, addition and subtraction of rationals, multiplication and division of rationals, multi-step equations and inequalities, functions and graphing, ratio, proportion and percent, statistics and probability, applied geometry and right triangles.

Intensive Algebra I CP

Full year: 2 credits (one math credit, one elective credit)

Recommended year: grade 10

Intensive Pre-Algebra will meet every day for a whole period. The course will provide an intensive focus on a variety of skills that will prepare and reinforce needed skills for progression to Algebra II and Geometry. Organizational and study skills will be stressed. All assignments are completed during class. Math topics will include: expressions, equations, and functions, rational numbers, solving linear equations, proportional reasoning, relations and functions, linear equations and inequalities, polynomials, factoring, quadratic and exponential functions, rational expressions and equations, radical expressions and equations, probability and statistics.

Algebra I CP

Full year: 1 credit

Recommended year: grade 9 or 10

Algebra I is the foundation in the mathematics program that leads to Geometry, Algebra II, Precalculus and Calculus. Math topics will include: expressions, equations, and functions, rational numbers, solving linear equations, proportional reasoning, relations and functions, linear equations and inequalities, polynomials, factoring, quadratic and exponential functions, rational expressions and equations, radical expressions and equations, probability and statistics.

Algebra I Honors

Full year: 1 credit

Recommended year: grade 9

Honors Algebra is a more rigorous program that provides students the opportunity to better prepare for advanced study in mathematics. Math topics will include: expressions, equations, and functions, rational numbers, solving linear equations, proportional reasoning, relations and functions, linear equations and inequalities, polynomials, factoring, quadratic and exponential functions, rational expressions and equations, radical expressions and equations, probability and statistics.

Intensive Pre-Algebra, Pre-Algebra, Intensive Algebra I CP, Algebra I CP, and Algebra I Honors provide students with the opportunity to demonstrate proficiency in the following Mathematics Graduation Standards:

- 1. Number and Quantity**
- 2. Algebra**
- 3. Functions**

Geometry CP

Prerequisite: Algebra I

Full year: 1 credit

Recommended year: grade 10 or 11

Math topics include: points, lines, planes, and angles, reasoning and proof, perpendicular and parallel lines, triangles and quadrilaterals, proportion and similarity, right triangles and trigonometry, circles, polygons and area, surface area and volume, coordinate geometry and transformations.

Geometry Honors

Prerequisite: Algebra I

Full year: 1 credit

Recommended year: grade 9 or 10

Honors curriculum is a rigorous course that prepares students for advanced math study. Math topics include: points, lines, planes, and angles, reasoning and proof, perpendicular and parallel lines, triangles and quadrilaterals, proportion and similarity, right triangles and trigonometry, circles, polygons and area, surface area and volume, coordinate geometry and transformations.

Geometry CP and Geometry Honors provide students with the opportunity to demonstrate proficiency in the following Mathematics Graduations Standards:

- 4. Geometry**

Algebra II CP

Prerequisite: Algebra I

Full year: 1 credit

Recommended year: grade 11

Topics include: Equations and inequalities, linear relations and functions, systems of linear equations and inequalities, matrices, polynomials and radical expressions, quadratic functions and inequalities, polynomial functions, rational functions, conics, logarithmic functions, sequences and series, and probability

Algebra II Honors

Prerequisite: Algebra I

Full year: 1 credit

Recommended year: grade 11

Honors curriculum is a more rigorous program that exceeds the standards providing the opportunity for students to complete advanced study. Topics include: equations and inequalities, linear relations and functions, systems of linear equations and inequalities, matrices, polynomials and radical expressions, quadratic functions and inequalities, polynomial functions, rational functions, conics, logarithmic functions, sequences and series, and probability

Algebra II, and Algebra II Honors provide students with the opportunity to demonstrate proficiency in the following Mathematics Graduation Standards:

- 1. Number and Quantity**
- 2. Algebra**
- 3. Functions**
- 5. Statistics & Probability**

Elementary Algebraic Models in Our World – MAT 103

Prerequisite: Student must be a member of the Bridge Program

Full year: 1 MVHS credit, and 3 University of Maine credits

Recommended year: grade 11. Grade 12 for students graduating in 2015

This course serves as an introduction to the applications of algebra with a focus on data analysis and model building. Topics include graphs, algebraic equations and functions. Primary attention will be given to using linear, quadratic and exponential functions to represent and interpret real world applications. Satisfies the University of Maine General Education Mathematics Requirement.

College Algebra-Dual Enrollment

Prerequisite: Algebra II, Junior or Senior Status, 2.5 CGPA, and permission of the instructor

Full year: 1 MVHS credit, and 3 Thomas credits

Recommended year: grade 12

This course will place a focus on traditional problem-solving methods in mathematics. Students will be asked to solve problems modeled by various functions including linear, quadratic, absolute value, polynomial, exponential, and logarithmic. Attention will be paid, throughout this course, to real-world applications from a broad range of disciplines such as the physical sciences engineering, business, economics, social sciences, life sciences, health sciences, sports, and other areas of student interest. (Thomas College Course Number - MS197)

College Algebra provides students with the opportunity to demonstrate proficiency in the following Mathematics Graduation Standards:

- 1. Number and Quantity**
- 2. Algebra**
- 3. Functions**
- 5. Statistics**

Pre-Calculus CP

Prerequisite: Algebra II

Full year: 1 credit

Recommended year: grade 11-12

Pre-Calculus is the fourth course in the mathematics program that leads to Calculus.

Topics include: probability, exponential and logarithmic functions, statistics, sequences and series, trigonometric functions, graphs of trigonometric functions, trigonometric identities and equations

Pre-Calculus Honors

Prerequisite: Algebra II, 2.5 CGPA, and permission of the instructor

Full year: 1 credit

Recommended year: grade 11-12

Honors curriculum is a more rigorous program that exceeds the standards, providing the opportunity for students to complete advanced study.

Pre-Calculus CP and Pre-Calculus Honors provide students with the opportunity to demonstrate proficiency in the following Mathematics Graduation Standards*

- 1. Number and Quantity**
- 2. Algebra**
- 3. Functions**
- 4. Statistics & Probability**

*** Prior to taking Pre-Calculus or Pre-Calculus Honors, it is assumed the student has met all of the Mathematics Standards necessary for graduation.**

Statistics and Probability CP

Prerequisite: Algebra II or Administrative Permission

One semester: 1/2 credit

Recommended year: grade 12

Topics include: Summarizing data, mean, median, and mode; range, variance, and standard deviation, box plots and stem-and-leaf plots and other histograms, frequency distributions and types of data (measurement and categorical variables). Probability models are explored, including probability, conditional probability, independence, samples and populations, random samples, the standard normal curve, and Z scores.

Statistics and Probability CP provide students with the opportunity to demonstrate proficiency in the following Mathematics Graduation Standards

- 5. Statistics & Probability**

Foundations of Quantitative Analysis: Mathematics, Research, and Applications

Prerequisites: Algebra II, or Administrative Permission

One semester: 1/2 credit

Recommended year: grade 12

This project-based course asks students to review fractions, percentages, decimals, word problems, linear functions (creating, graphing, and interpreting) and other mathematical concepts typically encountered in everyday life. Students will also apply basic concepts of algebra in the context of spreadsheet modeling. Most problems will require students to obtain real data from Internet sources and to use that data to address real applied problems from business and science. Students will use the spreadsheet app Numbers as the primary vehicle of analysis with students verifying some elements of their solutions using hand calculations and others using alternative spreadsheet models. Students will be expected to create and deliver presentations of their work using PowerPoint.

College Foundations of Quantitative Analysis: Mathematics, Research, and Applications – Dual Enrollment

Prerequisites: Algebra II, Junior or Senior Status, 2.5 CGPA, and permission of the instructor

One semester: 1/2 MVHS credit and 3 Thomas College credits.

Recommended year: grade 12

This project-based course asks students to review fractions, percentages, decimals, word problems, linear functions (creating, graphing, and interpreting) and other mathematical concepts typically encountered in everyday life. Students will also apply basic concepts of algebra in the context of spreadsheet modeling. Most problems will require students to obtain real data from Internet sources and to use that data to address real applied problems. Students will use Excel as the primary vehicle of analysis with students verifying some elements of their solutions using hand calculations and others using alternative spreadsheet models. Students will be expected to create and deliver presentations of their work using PowerPoint. (Thomas College Course Number - MS197)

Statistics and Foundations of Quantitative Analysis are designed so that a student can take them together to meet their fourth year math requirement. A student is also permitted to take each class as an elective.

Foundations of Quantitative Analysis and College Foundations of Quantitative Analysis provide students with the opportunity to demonstrate proficiency in the following Mathematics Graduation Standards:

2. Algebra

3. Functions

College Calculus I – Dual Enrollment

Prerequisite: Pre-Calculus, Junior or Senior Status, 2.5 CGPA, and permission of the instructor.

Full year: 1 MVHS credit and 3 Thomas College credits

Recommended year: grade 11 -12

This calculus course is designed as a senior math course suited for the student who plans to study a math oriented field in college or who simply enjoys the challenge of a higher level math course. Topics include: functions, graphs and limits, limits and their properties, derivatives, applications of differentiation, integrals, applications of integration. (Thomas College Course Number - MS231)

Advanced Placement Calculus AB

Prerequisite: Pre-Calculus, Junior or Senior Status, 2.5 CGPA, and permission of the instructor.

Full year: 1 MVHS credit. There is a three (3) Thomas College credit option

Recommended year: grade 11 -12

Advanced Placement Calculus is designed as a senior math course suited for the student who plans to study a math oriented field in college or who simply enjoys the challenge of a higher level math course. Students are required to take the AP exam offered in the spring.

Topics include: functions, graphs and limits, limits and their properties, derivatives, applications of differentiation, integrals, applications of integration. This course has a dual enrollment option.

SCIENCE

The MVHS Science Department provides a rigorous, relevant, and engaging curriculum that helps students develop a deep understanding of the physical, chemical and biological sciences. Courses are designed to provide students with meaningful opportunities to engage in scientific inquiry while strengthening their critical-thinking, problem-solving and communication skills. Students are required to complete three years of science, including one credit in freshmen science, one credit in a life science and one credit in a physical science.

For additional information relating the Next Generation Science Standards to the Common Core State Standards, please go to:

<http://www.nextgenscience.org/next-generation-science-standards>

Starting with the graduating class of 2018 all students must demonstrate proficiency in the following Science Graduation Standards:

1. Physical Sciences: Structure/Properties Of Matter, Forces And Interactions
2. Physical Sciences: Energy, Waves, And Electromagnetic Radiation
3. Life Sciences: Structure, Function And Information Processing
4. Life Sciences: Matter And Energy In Organisms and Ecosystems
5. Life Sciences: Growth, Development, And Reproduction of Organisms, Natural Selection, And Adaptations
6. Earth and Space Sciences: Earth, Space And The Universe
7. Earth and Space Sciences: Earth Systems
8. Engineering, Technology, And Application of Science

For additional information on the Science Graduating Standards please visit the following website:

<http://www.maine.gov/doe/proficiency/standards/science.pdf>

Physical Science CP (freshmen science)

Full year: 1 credit

Recommended year: grade 9

This course is an introduction to aspects of physics and chemistry designed to prepare students for upper level science courses. Critical thinking skills, science vocabulary, laboratory practices, and scientific research and communication will be emphasized.

Physical Science Honors (freshmen science)

Prerequisite: Algebra I (may be taken concurrently)

Full year: 1 credit

Recommended year: grade 9

The honors curriculum is a more rigorous program that goes beyond the scope of college preparatory science.

Physical Science CP and Physical Science Honors provide students with the opportunity to demonstrate proficiency in the following Science Graduation Standards:

1. Physical Sciences: Structure/Properties of Matter, Forces And Interactions
6. Earth and Space Sciences: Earth, Space And The Universe
7. Earth and Space Sciences: Earth Systems

Biology CP Technical

Prerequisite: Physical Science

Full year: 1 credit

Recommended year: grade 10

Emphasis will be placed on hands on activities and application of learning to solve real problems. Topics covered include the scientific method, cells, cell reproduction, genetics, evolution, classification, and ecology. Lab work and group work are included as much as possible.

Biology CP

Prerequisite: Physical Science

Full year: 1 credit

Recommended year: grade 10

Emphasis will be placed on lab activities and application of learning to solve real problems. The class discusses the scientific method, ecology, biochemistry, cells, enzymes, cellular respiration, photosynthesis, cell reproduction, protein synthesis, DNA, genetics, evolution, and classification. An independent research project is required.

Biology Honors

Prerequisite: Physical Science, 2.5 CGPA, and permission of the instructor.

Full year: 1.5 credits

Recommended year: grade 10

This course is designed to give students a solid background in the life sciences in order to prepare them to major in a science subject in college. Lectures, lab activities, and applying knowledge to solve real problems are stressed. Topics covered include the scientific method, ecology, biochemistry, cells, enzymes, cellular respiration, photosynthesis, cell reproduction, DNA, protein synthesis, genetics, evolution, and classification. An independent research project is required by the end of the year.

Advanced Placement Biology

Prerequisite: Biology CP, Chemistry CP, 2.5 CGPA, and permission of the instructor

Full year: 1.5 credits

Recommended year: grade 12

This academically challenging course is for those students interested in the biological sciences and who want to earn college credit through the AP program. Topics include chemistry, cells, cellular respiration, photosynthesis, genetics, protein synthesis, DNA technology, evolution, anatomy and physiology of plants and animals, animal behavior, and ecology. This course consists of lectures, discussions, and twelve required labs. Students are required to take the AP exam offered in the spring.

Biology CP, Biology Honors and Advanced Placement Biology provide students with the opportunity to demonstrate proficiency in the following Science Graduation Standards:

3. Life Sciences: Structure, Function And Information Processing

4. Life Sciences: Matter And Energy In Organisms and Ecosystems

5. Life Sciences: Growth, Development, And Reproduction of Organisms, Natural Selection, And Adaptations

Chemistry CP Technical

Full year: 1 credit

Recommended year: grade 11

The first semester focuses on basic chemical principles, such as the classification of matter, its properties, and the changes it undergoes. Topics covered also include atomic structure, trends in reactivity, reactions of acids and bases, and nuclear chemistry. The second semester focuses on practical applications of these concepts. Units covered include the chemistry of household items (plastics, detergents, carbonated beverages), pulp and paper, wastewater treatment, and batteries.

Chemistry CP

Prerequisite: Algebra I (may be taken concurrently)

Full year: 1 credit

Recommended year: grades 11-12

Lab activities stress the development of technical skills and use the scientific method. Course requirements include problem assignments, lab reports and an individual research project. Topics covered include matter, energy, atomic structure, periodicity, phases of matter, chemical change, acids and bases, solutions, gas laws and electrochemistry.

Chemistry Honors

Prerequisite: Algebra I and II (may be taken concurrently), Biology CP or Honors, 2.5 CGPA, and permission of the instructor.

Full year: 1.5 credits

Recommended year: grades 11-12

This class emphasizes deductive reasoning and the scientific method and is designed for the student planning to enter a science related field. Well-developed math skills are essential for success in this lab-oriented course. Topics covered include atomic structure, molecular geometry, chemical bonding, periodicity, kinetics, equilibrium, gas laws, acids and bases, solutions, kinetic theory and electrochemistry. A minimum grade of an 80 must be maintained for each quarter or the student will be asked to move to CP Chemistry.

Chemistry Technical CP, Chemistry CP, and Chemistry Honors provide students with the opportunity to demonstrate proficiency in the following Science Graduation Standards:

- 1. Physical Sciences: Structure/Properties Of Matter, Forces And Interactions**
- 2. Physical Sciences: Energy, Waves, And Electromagnetic Radiation**
- 8. Engineering, Technology, And Application of Science**

Chemistry for Everyday Living – CHY 101

Prerequisite: Student must be a member of the Bridge Program

Full Year: 1 MVHS credits, and 3 University of Maine credits

Recommended year: grade 11. Grade 12 for students graduating in 2015.

This is a non-mathematical introduction to the basic principles of chemistry with an emphasis on how chemistry is relevant to everyday life. Topics will include nuclear, food, agricultural, drug, cosmetic, and polymer chemistry. Satisfies the University of Maine General Education Applications of Scientific Knowledge Requirement.

Physics CP Technical

Prerequisite: Algebra I

Full year: 1 credit

Recommended year: grades 11-12

The primary purpose of the course is to introduce students to the world of technology and engineering. Through practical, real-world connections and hands-on activities the class provides opportunities to understand how science, mathematics, and engineering are part of the everyday world, and why it is important for every citizen to be technologically and scientifically literate.

Physics CP

Prerequisite: Algebra I, Geometry

Full year: 1 credit

Recommended year: grades 11-12

This is a college preparatory class designed to provide background in the field of physics. Units studied include kinematics, dynamics, work and energy, optics, electricity, and magnetism. Requirements include writing lab reports and keeping a notebook of questions and problems.

Advanced Placement Physics B

Prerequisite: Algebra II, Chemistry CP, 2.5 CGPA, and permission of the instructor

Full year: 1.5 credits

Recommended year: grade 12

This course is designed to provide the background needed to prepare to major in a scientific area such as physics, engineering, or medicine. It requires highly developed mathematical and reasoning skills. AP Physics 1: Algebra-Based is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. Students are required to take the AP exam offered in the spring.

Physics Technical CP, Physics CP, and Advanced Placement Physics B provide students with the opportunity to demonstrate proficiency in the following Science Graduation Standards:

- 1. Physical Sciences: Structure/Properties Of Matter, Forces And Interactions**
- 2. Physical Sciences: Energy, Waves, And Electromagnetic Radiation**
- 6. Earth and Space Sciences: Earth, Space And The Universe**
- 7. Earth and Space Sciences: Earth Systems**
- 8. Engineering, Technology, And Application of Science**

Horticulture I CP (Botany)

Full year: 1 credit

Recommended year: grades 9-12

This course focuses on plants and greenhouse operation. It provides an introduction to all aspects of propagating, growing, and using plants and plant materials.

Horticulture II CP (Advanced Botany)

Prerequisite: Horticulture I or Administrative Approval

Full year: 1 credit

Recommended year: grades 10-12

This course involves the student in all aspects of greenhouse operation and management. In addition, cold frame designs and uses are studied; experimental vegetable gardens are planned and planted; raised beds are constructed; and basic landscaping concepts are introduced. An essential component of this course is the raising and collecting of heirloom seeds as part of a national network of seed-savers.

Horticulture I, and Horticulture II provide students with the opportunity to demonstrate proficiency in the following Science Graduation Standards:

4. Life Sciences: Matter and Energy in Organisms and Ecosystems

5. Life Sciences: Growth, Development, and Reproduction of Organisms, Natural Selection, and Adaptations

Human Anatomy and Physiology Honors

Prerequisite: Biology CP and Chemistry CP recommended, 2.5 CPGA and permission of the instructor

Full year: 1.5 credits

Recommended year: grade 12

This is an honors level course designed to prepare those students interested in entering a medical or life science field. The human body systems, diseases/disorders of the body, and careers related to the health profession are covered in this course. A research paper is required, using research obtained in class via the Internet. Computer proficiency is necessary for success in this course.

Human Anatomy and Physiology Honors provide students with the opportunity to demonstrate proficiency in the following Science Graduation Standards:

3. Life Sciences: Structure, Function And Information Processing

4. Life Sciences: Matter And Energy In Organisms And Ecosystems

5. Life Sciences: Growth, Development, And Reproduction Of Organisms, Natural Selection, And Adaptations

Marine Science

Prerequisite: Biology

Full year: 1 credit

Recommended year: grades 11-12

This elective class focuses on the ocean and the coast of Maine. Subjects covered include the ecology of marine environments, physical oceanography, a thorough survey of marine life, ocean geology and humans' impact on the ocean ecosystem. This class requires strong lab skills and the ability/willingness to research information outside of class. When possible, field trips will be incorporated into the class.

Marine Science provides students with the opportunity to demonstrate proficiency in the following Science Graduation Standards:

4. Life Sciences: Matter And Energy In Organisms And Ecosystems

5. Life Sciences: Growth, Development, And Reproduction Of Organisms, Natural Selection, And Adaptations

SOCIAL STUDIES

Social studies courses emphasize essential core understandings and skills, which students need to master in order to function as an effective citizen in a democratic society and a globally interdependent world. Students are encouraged to work beyond the required credits to expand and deepen their core knowledge of our nation's heritage, to understand other cultures, and to acquire important social science concepts and life skills. Students are required to complete three credits in social studies including one credit in World History, one credit in U.S. History, one half credit in Government and one half credit in Economics.

For additional information on the Maine Learning Results, Social Studies Standards please visit the following website: <http://www.maine.gov/education/lres/pei/ss102207.pdf>

Starting with the graduating class of 2018 all students must demonstrate proficiency in the following Social Studies Graduation Standards:

- 1. Applications of Social Studies Processes, Knowledge, and Skills**
- 2. Civic Engagement**
- 3. Civics and Government**
- 4. Economics**
- 5. Geography**
- 6. History**

For additional information on the Social Studies Graduating Standards please visit the following website:
<http://www.maine.gov/doe/proficiency/standards/socialstudies.pdf>

World History CP

Full year: 1 credit

Recommended year: grade 9

This survey course emphasizes the development of major civilizations from ancient times up to the modern era. Students explore ancient, classical and medieval history in a number of areas including Europe, Asia, and Africa. Students will focus on essential themes and understandings including political systems; time, continuity and change; and the development of human civilizations with an emphasis on how belief systems influence civilizations. The second semester will focus on the advantages and disadvantages of European modernization. Students develop an appreciation for the historical development of democratic values and institutions from a Western perspective. Students will learn and apply critical reading, writing, and thinking skills through primary source analysis, academic research, essay writing, and debates.

World History Honors

Full year: 1 credit

Recommended year: grade 9

The honors curriculum is a more rigorous program that uses more primary source material and other reading material at or above grade level.

World History CP and World History Honors provide students with the opportunity to demonstrate proficiency in the following Social Studies Graduation Standards:

- 1. Applications of Social Studies Processes, Knowledge, and Skills**
- 3. Civics and Government**
- 5. Geography**
- 6. History**

Advanced Placement Human Geography

Prerequisite: Incoming freshmen must have demonstrated the ability to work at an advanced level and receive permission from the instructor. Current MVHS students must have a 2.5 CGPA, and permission of the instructor.

Full year: 1 credit

Recommended year: grades 9-12

This course will introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the earth's surface. Students will employ spatial concepts and landscape analysis to examine human social organization. They will also learn about the methods and tools geographers use in their science and practice. Students will be required to take the AP Human Geography exam offered in the spring. Students can take this course in place of World History or as an elective.

AP Human Geography provides students with the opportunity to demonstrate proficiency in the following Social Studies Graduation Standards:

- 1. Applications of Social Studies Processes, Knowledge, and Skills**
- 3. Civics and Government**
- 4. Economics**
- 5. Geography**
- 6. History**

20th Century Asia (1914-1945) CP

One semester: 1/2 credit

Recommended year: grades 10 - 12

Recommended: Grade 10 elective

This course focuses on Asia in the first half of the twentieth century with an emphasis on Japan's rise to power, the Second World War in Asia, and the spread of communism after the war. The course will examine political, social, and economic factors that shaped the course of events along the Pacific Rim. The course will examine the strategies and tactics of various military leaders and the significance of well-known battles. In addition, the course will explore connections between current political and economic factors and past events.

20th Century Europe (1914-1945) CP

One semester: 1/2 credit

Recommended year: grades 10 - 12

Recommended: Grade 10 elective

This course explores Europe in the age of two world wars focusing on the causes and long-term consequences. The course will explore the concurrent political and economic problems that created various alliances before, during, and after this crucial period.

20th Century Europe CP and 20th Century Asia CP provide students with the opportunity to demonstrate proficiency in the following Social Studies Graduation Standards:

- 1. Applications of Social Studies Processes, Knowledge, and Skills**
- 6. History**

Maine History CP

One semester: 1/2 credit

Recommended year: grades 10-12

Recommended: Grade 10 elective

This course explores life in northern New England from pre-history Wabanaki culture to current issues facing Maine and its future. Topics to be discussed include historic and ongoing contributions of Wabanakis, immigration trends and influences, military conflicts, economic trend, and how geography has affected culture in Maine.

Maine History CP provide students with the opportunity to demonstrate proficiency in the following Social Studies Graduation Standards:

1. Applications of Social Studies Processes, Knowledge, and Skills

3. Civics and Government

4. Economics

5. Geography

6. History

U.S. History CP

Full year: 1 credit

Recommended year: grade 11

This course will survey the history of the United States from pre-European contact to the modern era. Particular attention will be given to our expanding nation, political parties, competing economic interests, and the Supreme Court. Throughout the year, individuals who have made a significant impact upon the political, economic, and social developments of civilization will be closely examined. This course moves at an accelerated pace and includes a long-term research project.

College U.S. History to the Civil War - Dual Enrollment

Prerequisite: Junior or Senior Status, 2.5 CGPA, and permission of the instructor.

One semester: ½ MVHS credit, and 3 Thomas College credits

This course covers the development of the United States from early colonization. The values of democracy, the Revolutionary Period, Jeffersonian Democracy, slavery, sectionalism, the Civil War, and Reconstruction are discussed. (Thomas College Course Number - HG 321)

College U.S. History Since the Civil War – Dual Enrollment

Prerequisite: HG 321, Junior or Senior Status, 2.5 CGPA, and permission of the instructor.

One semester: ½ MVHS credit, and 3 Thomas College credits

Westward expansion, industrialization, imperialism, World War I, the Twenties and Thirties, World War II, and the post-World War II period are discussed. Emphasis is on cultural, economic, and political developments. (Thomas College Course Number - HG 322)

Advanced Placement U.S. History

Prerequisite: 2.5 CGPA, and permission of the instructor.

Full year, one credit

Grade Level: grade 11

The course will survey the history of the United States from the colonial era to modern times, focusing on expository essay writing and the DBQ (Document Based Question) method of inquiry. This course will examine the state, local and federal structures in the U.S., the role of the citizen in a democracy, and foreign government. The topics of civil disobedience and international diplomacy will be infused throughout the curriculum. This course covers a college-level curriculum at an advanced pace. Students will be required to take the AP exam offered in the spring.

U.S. History CP, College U.S. History to the Civil War, College U.S. History Since the Civil War, and Advanced Placement U.S. History provide students with the opportunity to demonstrate proficiency in the following Social Studies Graduation Standards:

- 1. Applications of Social Studies Processes, Knowledge, and Skills**
- 3. Civics and Government**
- 5. Geography**
- 6. History**

Introduction to Maine Studies - MES 101

Prerequisite: Student must be a member of the Bridge Program.

Full year: 1 MVHS credit, and 3 University of Maine credits

Recommended year: grade 11. Grade 12 for students graduating in 2015.

An interdisciplinary approach to the study of Maine through sources in history, literature, political science, Native American studies, Franco American studies, and other fields. The unifying theme is the significance of locality in understanding the interaction between the landscape and the people. How does the Maine landscape shape people's choices? How do the people use the state's landscape and resources? How do social, demographic, cultural, and environmental factors shape this relationship throughout history? The activities examined include farming, fishing, lobstering, and lumbering. How have commercial interests intersected with environmental concerns? The cultures considered include Native American, early Anglo settlers, later Irish and Franco immigrants, and more recent immigration and refugee communities.

Psychology CP

One semester: 1/2 credit

Recommended year: grades 11-12

This course will address the ways in which psychology benefits society and improves people's lives. Human attitudes, values, and behavior will be examined in depth. Particular emphasis will be given to the importance of cultural diversity in understanding human behavior and interactions. Students will develop critical thinking skills, learn to support their verbal and written arguments with evidence from legitimate sources, and integrate course knowledge with other disciplines of study. Discipline-specific writing and outside reading of texts and journals will be required. Course domains and content areas will be based on the 2011 Standards for High School Psychology as developed by the American Psychological Association.

College General Psychology – Dual Enrollment

Prerequisites: Junior or Senior Status, 2.5 CGPA, and permission of the instructor.

One semester: ½ MVHS credit, and 3 Thomas College credits

This course introduces the scientific study of behavior. It deals with such topics as learning, memory, motivation, consciousness, emotions, perceptions and experience, personality, interpersonal relations, conflict, and research methods. (Thomas College Course Number- PSY111)

College Introduction to Criminal Justice – Dual Enrollment

Prerequisites: Junior or Senior Status, 2.5 CGPA, and permission of the instructor.

One semester: ½ MVHS credit, and 3 Thomas College credits

This introductory course is designed to provide the student an introduction to the structure and operation of law enforcement, prosecution, the courts, and corrections. Subject areas to be covered will include knowledge of terminology, classification systems, trends and theories of criminal justice.

Upon completion of this course, students will be able to: Identify the major goals of the criminal justice system to include: guaranteeing due process, crime prevention, protection of life and property, apprehension of the offender, enforcement of the law, and equal justice • List and explain the major components of the criminal justice system • Discuss the major agencies within each of the criminal justice system components • Identify the primary function, jurisdiction and area of potential mutual assistance between federal, state and local law enforcement agencies • Define the typical series of events involved in the detection and prosecution of a crime • Define key terms related to the processing of criminal defendants • Identify the divisions of the Maine Court System, their functions and methods for appeal • Identify the major elements of court procedure for trying and sentencing criminal offenders. (Thomas College Course Number - CJ121)

College Principles of Sociology- Dual Enrollment

Prerequisites: Junior or Senior Status, 2.5 CGPA, and permission of the instructor.

One semester: ½ MVHS credit, and 3 Thomas College credits

Recommended year: grades 11-12

This course introduces the principles and concepts necessary for understanding the nature of society and culture. Special emphasis is placed upon the structure of economic, political, familial, religious, and other societal organizations. (Thomas College Course Number - SY113)

Geography through Current Events CP

One semester: ½ credit

Recommended year: grades 10-12

Recommended: Grade 10 elective

This course will focus on using current events to explore the concepts of geography. The course will examine how humans and their interactions with each other and their environment shape world events. Local, state, national, and international current events will be discussed. Current events will be used as a stepping off point to discuss how cultural characteristics make specific regions of the state, country, and world distinctive.

Geography through Current Events provide students with the opportunity to demonstrate proficiency in the following Social Studies Graduation Standards:

1. Applications of Social Studies Processes, Knowledge, and Skills

5. Geography

6. History

Economics CP

One semester: 1/2 credit

Recommended year: grade 12

This course addresses the principles of both microeconomics and macroeconomics and their application to modern economic issues. Lessons will include economic decision-making by individuals and firms, markets and pricing, employment, income distribution, the role of government intervention in markets, and monetary/fiscal policy. Students will discuss the implications of various economic revolutions, trends and the future of economic development. This course moves at an accelerated pace and includes a long-term research project. It requires strong reading and writing skills and discipline to complete nightly reading and note-taking assignments.

Advanced Placement Economics (Microeconomics /Macroeconomics)

Prerequisites: 2.5 CGPA, and permission of the instructor.

Full year: 1 credit (meets Economics requirement)

Recommended year: grade 12

Microeconomics studies the principles that apply to the individual decision maker. Emphasis is placed on supply and demand, product markets, factor markets, costs, revenue, and profit and market structures. Macroeconomics studies the principles that apply to an economic system as a whole. Emphasis is placed on aggregate supply and demand, GDP, inflation, unemployment, fiscal policy, monetary policy, and international economics. This is a college-level curriculum with an advanced pace and complex material. The College Board offers two separate examinations in economics: one in microeconomics and one in macroeconomics for a total of 6 possible college credits. Students will be required to take either the AP microeconomics, or AP macroeconomics exam in offered in the spring, and are encouraged to take both.

CP Economics and Advanced Placement Economics provide students with the opportunity to demonstrate proficiency in the following Social Studies Graduation Standards:

1. Applications of Social Studies Processes, Knowledge, and Skills

3. Civics and Government

4. Economics

Government CP

One semester: 1/2 credit

Recommended year: grade 12

This course will examine the state, local and federal structures in the U.S., the role of the citizen in a democracy, and foreign government. The topics of civil disobedience and international diplomacy will be given special attention. This course moves at an accelerated pace and includes a long-term research project. It requires strong reading and writing skills and discipline to complete nightly reading and note-taking assignments.

Advanced Placement U.S. Government and Politics

Prerequisites: 2.5 CGPA, and permission of the instructor.

One semester (fall): 1/2 credit (meets Government requirement)

Recommended year: grades 10-12

This course is intended to be the equivalent of a one-semester college introductory course in United States government and politics. We will cover six units including constitutional underpinnings, political beliefs and behaviors, political parties, the three branches of government and bureaucracy, public policy, and civil rights. There will be extensive reading, several exams, and written reports. Students will be required to take the AP exam offered in the spring.

CP Government and Advanced Placement U.S. Government and Politics provide students with the opportunity to demonstrate proficiency in the following Social Studies Graduation Standards:

- 1. Applications of Social Studies Processes, Knowledge, and Skills**
- 2. Civic Engagement**
- 3. Civics and Government**
- 6. History**

WORLD LANGUAGES

Proficiency in a modern language enables direct communication with peoples of other cultures, in addition to helping students gain insight into their own language. Career opportunities in business, law, medicine, and engineering are enhanced with knowledge of a world language. Spanish and French are among the most common non-English languages used in international commerce. Success in another language is the result of a combination of ability and personal interest in a world language. Students will demonstrate proficiency in the four skill areas of listening, speaking, reading, and writing, as well as an understanding of the target language culture(s).

Students will benefit greatly from studying and learning one world language for as many years as possible. Teachers recommend that students begin only one spoken language at a time.

For additional information on Maine Learning Results, World Languages standards please visit the following website: http://www.maine.gov/education/lres/pei/wld_lang102207.pdf

Starting with the graduating class of 2018 all students must demonstrate proficiency in the following World Languages Graduation Standards:

**Interpersonal Communication
Interpretive Communication
Presentational Communication
Comparison of Practices, Products and Perspectives
Communities**

For additional information on the World Languages Graduation Standards please visit the following website:
<http://www.maine.gov/doe/proficiency/standards/world-languages.pdf>

French I CP

Full year: 1 credit

This introductory course offers an opportunity to learn to communicate in French and to develop an appreciation for the cultural diversity of the Francophone world. Emphasis is on listening comprehension and spoken French, with secondary emphasis on writing and reading. Conversational skills and cultural awareness are emphasized through videos and audio exposure to real life situations. Basic vocabulary, grammar, and idioms are learned while practicing correct pronunciation and intonation patterns. Paired and small group activities reinforce the acquisition of communication skills.

French I Honors

Full year: 1 credit

This class is designed to explore introductory French at a faster pace and greater depth, encouraging independent work and additional linguistic and cultural activities.

The learning goals for French I CP, and French I Honors are for students to demonstrate a basic understanding of the target culture and language through simple conversations, short readings, and writings.

French II CP

Prerequisite: French I

Full year: 1 credit

French II is designed to fulfill the minimum entrance requirement for most colleges. French II continues from where French I ended. Many of the same types of activities are practiced at a more advanced level. High interest situations continue to be the basis for culture, new structures, and new vocabulary. There is increased emphasis on grammar, reading, and writing during the second year. The course includes activities designed to familiarize students with cultural aspects of the French-speaking world.

French II Honors

Prerequisite: French I

Full year: 1 credit

French II Honors is designed for students who have a strong interest in foreign language and who intend to advance to French III. French II Honors continues from where French I ended the previous year. Many of the same types of activities that were practiced in French I will be continued, but with increasing emphasis on advanced communication including extensive vocabulary and complex grammatical constructions. Cultural enrichment such as films entirely in French will enhance the program.

The learning goals for French II CP and French II Honors are for students to demonstrate a deeper understanding of the target culture, and to demonstrate proficient skill communicating in the target language using appropriate present and past verb tenses.

French III Honors

Prerequisite: French II CP or Honors

Full year: 1 credit

French III Honors students review and master the concepts and skills learned in levels I and II including listening comprehension, oral communication, verb conjugations, sentence structure, and use of idioms. This course offers the serious student opportunities to acquire more sophisticated grammatical and conversational patterns and is conducted primarily in French. Various readings in French as well as videos and films are used to broaden literary and cultural insights. Dialogues, skits, and short writing assignments in French reinforce and enhance linguistic skills. Extracurricular travel to French-speaking locales may be offered.

The learning goals for French III Honors are for students to demonstrate an understanding of similarities and differences between the target culture and their own. Students will also be able to briefly discuss some everyday topics in the target language.

French IV Honors

Prerequisite: French III Honors

Full year: 1 credit

The aim of French IV Honors is to prepare a student to be proficient enough to survive where French is spoken. Many materials are used including a basic text, novels, newspapers, magazines, short stories, and poetry. The class is conducted primarily in French, emphasizing conversational skills along with reading and writing proficiency. French IV Honors is designed for those with a sincere interest in using French as a second language.

The learning goals for French IV Honors are for students to demonstrate a knowledge and understanding of cultural differences and traditions. They will be able to speak more extemporaneously about everyday topics. They will also be able to summarize texts and/or situations in the target language.

Spanish I CP

Full year: 1 credit

This introductory course offers the student an opportunity to learn to communicate in Spanish and to develop an appreciation for the cultural diversity of the Spanish-speaking world. Emphasis is on listening comprehension and spoken Spanish, with secondary emphasis on reading and writing. Conversational skills and cultural awareness are built through audio and video exposure to real life situations. With the goal of mastering elementary communication, students learn basic vocabulary, grammar, and idioms while practicing correct pronunciation and intonation patterns. Paired and small group activities reinforce the acquisition of communication skills.

Spanish I Honors

Full year: 1 credit

This class is designed to explore introductory Spanish at a faster pace and greater depth, encouraging independent work and additional linguistic and cultural activities.

The learning goals for Spanish I CP, and Spanish I Honors are for students to demonstrate a basic understanding of the target culture and language through simple conversations, short readings, and writings.

Spanish II CP

Prerequisite: Spanish I

Full year: 1 credit

Spanish II is designed for students who wish to take a second year of language to fulfill the minimum entrance requirement for many colleges. Spanish II continues from where Spanish I ended the previous year. Many of the same types of activities are practiced at a more advanced level and a faster pace. High interest situations continue to be the basis for culture, new structures, and new vocabulary. There is increased emphasis on grammar, reading and writing during this second year. The course includes activities designed to familiarize students with cultural aspects of the Spanish-speaking world as well as enhance their ability to communicate with native speakers.

Spanish II Honors

Prerequisite: Spanish I

Full year: 1 credit

Spanish II Honors is designed for students who have a strong interest in foreign language and who intend to advance to Spanish III. Spanish II Honors continues from where Spanish I ended the previous year. Many of the same types of activities that were practiced in Spanish I are continued, but with increasing emphasis on advanced communication including extensive vocabulary and complex grammatical constructions. Cultural enrichment including films entirely in Spanish and guest speakers, when available, enhance the program.

The learning goals for Spanish II CP and Spanish II Honors are for students to demonstrate a deeper understanding of the target culture, and to demonstrate proficient skill communicating in the target language using appropriate present and past verb tenses.

Spanish III Honors

Prerequisite: Spanish II CP or Honors

Full year: 1 credit

Spanish III Honors students review and master the concepts and skills learned in Levels I and II, including listening, comprehension, oral communication, verb conjugations, sentence structure, and use of idioms. This course offers the serious student opportunities to acquire more sophisticated grammatical and conversational patterns and is conducted primarily in Spanish. Various readings in Spanish as well as videos and films are used to broaden literary and cultural insights. Dialogues, skits, and short writing assignments in the target language reinforce and enhance linguistic skills. Extracurricular travel to Spanish-speaking locales may be offered. Guest speakers, when available, offer further enrichment opportunities.

The learning goals for Spanish III Honors are for students to demonstrate an understanding of similarities and differences between the target culture and their own. Students will also be able to briefly discuss some everyday topics in the target language.

Spanish IV Honors

Prerequisite: Spanish III Honors

Full year: 1 credit

The goal of Spanish IV Honors is to enable the serious student of the language to become proficient enough to survive where Spanish is spoken. Successful completion of Spanish IV provides the possibility of entering college classes in this language at the intermediate level. The class is conducted primarily in Spanish. Curriculum includes more advanced literary, cultural, and historical readings, as well as current events from a variety of primary Peninsular Spanish and Latin American sources. Opportunities to travel to Spanish-speaking locales are included. Spanish IV is designed for those with a sincere interest in using Spanish as a second language and/or of continuing the study of Spanish at a more advanced level in college.

The learning goals for Spanish IV Honors are for students to demonstrate a knowledge and understanding of cultural differences and traditions. They will be able to speak more extemporaneously about everyday topics. They will also be able to summarize texts and/or situations in the target language.

French I-IV and Spanish I-IV provides students with the opportunity to demonstrate proficiency in the following World Language Graduation Standards:

Interpersonal Communication

Interpretive Communication

Presentational Communication

Comparison of Practices, Products and Perspectives

Communities

VISUAL, PERFORMING AND APPLIED ARTS

The fine and applied arts department is comprised of art, photography, drama, music, family and consumer science, communication technology, filmmaking, and technology education. Fine and applied arts courses are designed to give students the opportunity to apply their knowledge and learned skills to produce practical and personally creative work. A hands-on approach challenges students to solve problems in real life situations. All fine and applied arts courses beyond the one credit requirement are elective courses. For additional information on the Maine Learning Results Visual and Performing Arts Standards, please visit the following website: <http://www.maine.gov/education/lres/pei/vpa102207.pdf>

Starting with the graduating class of 2018 all students must demonstrate proficiency in the following Visual, Performing and Applied Arts Graduation Standards:

- 1. Disciplinary Literacy**
- 2. Creation, Performance, Expression**
- 3. Creative Problem Solving**
- 4. Aesthetics And Criticism**
- 5. Connections**

For additional information on the Visual and Performing Arts Graduation Standards please visit the following website: <http://www.maine.gov/doe/proficiency/standards/visual-performing-arts.pdf>

VISUAL ARTS

Foundations of Art I

One semester: 1/2 credit

Recommended year: grades 9-12

This course is an introduction to two-dimensional design and is open to all students interested in the visual arts. Students will explore a series of design exercises that apply creative problem solving in the visual arts. Students will develop a working vocabulary to analyze and critique works of art they have produced. There will be an emphasis on black and white design the first quarter and color work the second quarter.

Foundations of Art II

Prerequisite: Foundations of Art I

One semester: 1/2 credit

Recommended year: grades 9-12

With an emphasis on drawing and painting this course will introduce students to a broad range of materials through which they will learn a variety of techniques and methods of visual expression. There will also be an introduction to art history and art appreciation for students to analyze and critique the masterpieces of famous artists. This course is required for some advanced visual art course.

Creative Design

One semester: 1/2 credit

Recommended year: grades 9-12

This course will study the basics of art through work on two-dimensional and three-dimensional projects. The principles and elements of art will be explored through work projects that range from functional objects to aesthetic sculptural forms, with an emphasis on craftsmanship.

Individual creative projects involving various skills and problem solving will help students develop a visual literacy that they can apply to everyday life.

Clay (Ceramics) I

Full year: 1 credit

Recommended year: grades 9-12

Students will learn the process of both hand building and wheel throwing clay. Projects will range from utilitarian to sculptural. Students will learn about various types of clay, as well as clay preparation, recycling, firing, and glazing techniques. The emphasis will be on the use of clay but the course can also cover a variety of other sculptural media, including wood, plaster, wire, environmental, and found objects. This course will also develop critical thinking skills, problem solving and craftsmanship.

Clay (Ceramics) II

Prerequisite: Clay I

Full year: 1 credit

Recommended year: grades 11-12

This course has students focus on building a personal style of clay work through either hand building or wheel throwing or a combination of the two. Projects will give direction and guidance to the class, but students may meet the goals of the assignments and still modify the process to meet their personal style criteria. Higher development of critical thinking skills, problem solving, excellent craftsmanship, and persistence as experienced through Clay I are course expectations.

Drawing and Painting

Prerequisite: Foundations of Art I and II

Full year: 1 credit

Recommended year: grades 10, 11,12

This course builds on the principles and elements of art mastered in Foundations of Art, and is designed for the serious study of art. The curriculum is divided into three units of study: life drawing, printmaking and painting. A variety of new drawing, painting, printmaking and mixed media techniques will be introduced and explored.

Advanced Placement Studio Art 2D Design

Prerequisites: Photography or Drawing and Painting, 2.5 CGPA, and permission of the instructor

Full year: 1 credit

Recommended year: grade 11

Students will develop an advanced placement portfolio in accordance with the approved College Board syllabus. Students will develop a body of work that demonstrates depth of understanding and mastery of three goals: breadth, concentration, and quality. This course teaches students a wide variety of concepts and approaches that can be used to demonstrate proficiency in a variety of media. Students will develop a concentration in a series of work that investigates an area of personal interest. Interested sophomores should meet with the fine arts department for a portfolio review and list of summer assignments before June. Students will be required to fulfill the AP testing requirements (portfolio submission) in the spring.

Black and White Photography

Prerequisite: Foundations of Art I or Creative Design

One semester: 1/2 credit

Recommended year: grades 11-12

This course will cover the basic techniques of black & white photography. Students will learn to use a 35mm camera, develop film print photographs, and present the finished product. The emphasis will be on photography as a fine art form. This course will also explore the historical significance of photography and its acceptance as an art form, with focus on specific artists past and present. There will be a demonstrated study of specific photographers and their art. It is suggested that students have access to their own 35mm non-digital cameras.

Advanced Photography

Prerequisite: Black and White Photography or Digital Imaging

Full year: 1 credit

Recommended year: grades 11-12

This course will continue to introduce more advanced camera and darkroom techniques, but will also be designed to meet individual needs. Students will be expected to photograph school and community activities and to produce a portfolio at the end of each semester. Students will be invited to display their work in an exhibition setting. There will be a community service component with this course.

Digital Imaging

Prerequisite: Foundations of Art I or Creative Design

One semester: 1/2 credit

Recommended year: grades 10-12

This course explores techniques for creating, enhancing, manipulating, and processing the digital image. Students will use images from computer files, scanned images, and original digital camera images. Technical issues, such as file format, file storage, and transfer will be addressed, as well as the creative and artistic possibilities of the digital image. Hardware and software used will include Photoshop, digital cameras, and scanners. Students should have access to their own digital camera.

Photojournalism

Prerequisite: English II and I

One semester: 1/2 credit – may be taken in the fall and again in the spring

Recommended year: grades 11 (spring) and 12 (fall)

Journalism provides students an opportunity to develop and utilize the writing and design skills needed to produce publications including the MVHS yearbook, *Valley Echo*. The spring semester course begins with an introduction to press law and journalism ethics. Interviewing, feature writing, layout design, desktop publishing, proofreading and editing, advertising sales and design, and basic digital photography skills are all aspects of the spring semester. During the fall semester there are additional responsibilities for planning, organizing, and leading the production of the yearbook, serving as editors, section editors, photography editors, business managers, and advertising managers. The course requires both in-class and after school time.

Foundations of Art I, Foundations of Art II, Creative Design, Clay I, Clay II, Drawing and Painting, Advanced Placement Studio Art 2-D Design, Black and White Photography, Advanced Photography, Digital Imaging and Photojournalism provide students with the opportunity to demonstrate proficiency in the following Visual and Performing Arts Graduation Standards:

- 1. Disciplinary Literacy**
- 2. Creation, Performance, Expression**
- 3. Creative Problem Solving**
- 4. Aesthetics And Criticism**
- 5. Connections**

DRAMA

Theater

One semester: 1/2 credit

Recommended year: grades 9-12

This course is designed to give students an overview of voice training and acting techniques, improvisation and theater games, and play analysis and structure. Students will create works that reflect concepts and styles from their own and other cultures. This course is based upon Improvisation Through Theatre-Sports; a program developed by a consortium of actors who see improvisation as a sport and who have even developed a format for a worldwide acting "competition." Students will develop their improvisational acting skills through the techniques and activities in this course. This course may be taken only once for credit.

Theatre provides students with the opportunity to demonstrate proficiency in the following Visual and Performing Arts Graduation Standards:

- 1. Disciplinary Literacy**
- 2. Creation, Performance, Expression**
- 3. Creative Problem Solving**
- 4. Aesthetics And Criticism**
- 5. Connections**

Stage Design

Prerequisite: Survey of Technology or department recommendation

One semester: 1/2 credit

Recommended year: grades 10 - 12

This introductory course gives students a foundation in the basic skills of play production. Class time will include formal instruction in the use of scenery, audio-visual and prop production. Theory will be balanced by a wealth of hands-on experience. Students will create works that reflect concepts and styles from their own and other cultures. Grades will be determined by classroom performance as well as project work outside of class. This course may be taken only once for credit.

Video Production

Prerequisite: Foundations of Art I or Creative Design

Full year: 1 credit

Recommended year: grades 10 - 12

This course will involve all aspects of video production including script writing, acting, interviewing, camera work, and video editing. Students will produce video programs to be used within the school and to be broadcast on public access channels. Students will also work in teams and individually on creative projects involving the basics of video composition. Film appreciation will also be part of the curriculum presenting an historical perspective of important films and filmmakers.

Film Making

Prerequisite: Video Production

Full year: 1 credit

Recommended year: grades 10-12

This course is designed for students who wish to continue work in this field. The course will be project oriented with a focus on student-produced films and requires a great deal of self-discipline. Film appreciation will also be part of the curriculum presenting a historical perspective of important films and filmmakers.

Stage Design, Video Production and Film making provide students with the opportunity to demonstrate proficiency in the following Visual and Performing Arts Graduation Standards:

- 1. Disciplinary Literacy**
- 2. Creation, Performance, Expression**
- 3. Creative Problem Solving**
- 4. Aesthetics And Criticism**
- 5. Connections**

MUSIC

Concert Band

Prerequisite: Student must be able to play a wind or percussion instrument.

Full year: 1 credit

Recommended year: grades 9-12

This course is a wind and percussion ensemble open to all students who play an instrument. The ensemble focuses on the fundamentals of performance through a variety of literature. The ensemble performs in a minimum of three concerts per year as well as taking part in graduation ceremonies. Additionally, the ensemble may perform at home varsity basketball games and in local Memorial Day ceremonies. All students who play instruments are encouraged to sign up for this course.

Chorus

Full year: 1 credit

Recommended year: grades 9-12

Chorus is open to all students, regardless of previous experience or ability. Instruction in breathing, vocal production, blending, sight-reading and tone color is given. Students are exposed to a wide variety of musical styles. The ensemble performs in a minimum of three concerts a year. The major emphasis is on developing an ensemble of the highest quality possible.

Beginning Piano

One semester: 1/2 credit

Recommended year: grades 9-12

This course is for learning from the beginning how to play a keyboard instrument (piano) by using an electronic keyboard and headphones, and progressing at your own rate. Elements of music theory will be covered, and students will be able to play some tunes of their own choosing at a level consistent with their development. This course may also be available, with instructor's recommendation, to students who have engaged in study of the piano in the past.

Jazz Ensemble

Prerequisite: Students must be able to play an instrument and read music. An audition may be required.

Full year: 1 credit

Recommended year: grades 10-12

This course is open to students who play an instrument typically found in a traditional jazz band (i.e. alto, tenor or baritone saxophone, trumpet, trombone, guitar, bass guitar, drums and piano.) Topics covered will include reading standard jazz charts and experimenting with improvisation. The ensemble will perform on several occasions throughout the year both in and outside of the school setting. All students interested in playing in a jazz band are encouraged to sign up for this course.

Concert Band, Chorus, Beginning Piano, and Jazz Ensemble provide students with the opportunity to demonstrate proficiency in the following Visual and Performing Arts Graduation Standards:

- 1. Disciplinary Literacy**
- 2. Creation, Performance, Expression**
- 3. Creative Problem Solving**
- 4. Aesthetics And Criticism**
- 5. Visual and Performing Arts Connections**

History of Rock & Roll

One semester: ½ credit

Recommended year: grades 9-12

This class provides an in-depth study of rock and roll music. It investigates African and European musical traditions leading to the birth of rock and roll music in the 1950's. In addition, cultural, sociological, and political aspects of society are discussed in relationship to various musical styles representative of 1950's to the present. Students will develop an understanding of musical expression and its influence on American culture.

History of Rock & Roll provide students with the opportunity to demonstrate proficiency in the following Visual and Performing Arts Graduation Standards:

- 1. Disciplinary Literacy**
- 4. Aesthetics and Criticism**
- 5. Connections**

FAMILY AND CONSUMER SCIENCE

Foods & Nutrition I

One semester: 1/2 credit

Recommended year: grades 9-12

Students will learn how to prepare food that will be delicious and also nutritious and will study major nutrients, their effects on the body, and appropriate food sources. Students will practice and apply cooking principles, as nutritious foods are prepared. Students will learn about time management, kitchen procedures and safety, as well as reasons for making wise food choices.

Foods & Nutrition II

Prerequisite: Foods and Nutrition I

One semester: 1/2 credit

Recommended year: grades 9-12

Students will practice basic principles of food preparation, plan and prepare nutritious menus, and learn to spend the food dollar wisely. They will analyze food labels and learn to make healthy decisions. Students will also learn their rights as consumers.

Sampler I

One semester: 1/2 credit

Recommended year: grades 9-12

A sampler in quilt making is a quilt made up of blocks containing different quilting patterns. This course is like a quilt; it is made up of different techniques and skills. We will learn about the history of stenciling, basketry and quilting. There will be a hands-on opportunity to try each. We will also learn to knit, crochet, cake decorate and more. Students will learn skills they can take with them throughout their lives. This course can be taken only once for credit.

Sampler II

Prerequisite: Sampler I

One semester: 1/2 credit

Recommended year: grades 9-12

This course is offered every other year. In Sampler II, students will create a project or projects to expand upon the skills learned in Sampler I.

Consumer Economics (The Business of Living)

One semester: 1/2 credit

Recommended year: grades 11-12

This course is designed to provide students with practical skills for living independently.

Students gain knowledge about problem solving and defining their goals (e.g., selecting housing, credit cards, credit rating, financial institutions, shopping, preparing food, etc.)

International Cuisine

Prerequisite: Foods and Nutrition I, or administrative approval

One semester: 1/2 credit

Recommended year: grades 9-12

Come learn about the lands that have given us so many of our favorite foods and customs. Basic cooking principles will be applied as foods from countries such as Italy, China, Mexico, and Germany are studied. Willingness to prepare and appreciate new and ethnic foods is a requirement.

American Cookery

Prerequisite: Foods and Nutrition I, or administrative approval

One semester: ½ credit

Recommended year: grades 9-12

Our country has attracted immigrants from every nation on earth. When settling the New World, these people brought with them treasured traditions, which included the cooking methods and foods characteristic of their native homelands. In sharing their knowledge with their new neighbors, a new cuisine was born. In a region-by-region study, students will learn what these people have contributed to our cuisine, way of life, and heritage. Food preparation activities are planned to help students apply the basic principles of cookery by these regional cuisines.

Child Care and Development

One semester: ½ credit

Recommended year: grades 10-12

Do you like children? Do you like working with children? Do you dream of someday running your own daycare? Would you like to know more about children from infancy to grammar school age? This course is designed to give students information and skills to work with children. Students will learn about child development and build skills in first aid/CPR, emergency procedures, playtime, nutrition, and how to interact with children and parents. Students will work on communication skills, assessment, work ethic, and how to interview well. If you have any interest in children, this course is for you.

TECHNOLOGY EDUCATION

Survey of Technology I

Full year: 1 credit

Recommended year: grades 9-10

This year long course is taught in four quarterly components: woodworking, metalwork, small engine technology and introduction to drafting. Students will explore basic skills, tools and techniques in the above areas as they apply to technology. The course is designed to appeal to both males and females and to provide a background for other technology courses. During the course, students will produce or repair a product in each of the four areas of focus.

Survey of Technology II

Prerequisite: Survey of Technology I

Full year: 1 credit

Recommended year: grades 10-12

This course is designed for those students that want to advance their understanding of woodworking, metalworking, small engines and electronics. Students will examine technology with a global view and consider ways to minimize the carbon footprint. Students will have the opportunity to improve their skill set in areas of individual interest including wood turning on the lathe, design and production of advanced joints, working with different wood, sheet metal geometry, metal pattern making, forging, engine repair, communicating with microprocessors, and robot design.

Woodworking Technology

Prerequisite: Survey of Technology or previous woodworking experience

Full year: 1 credit

Recommended year: grades 10-12

Individual projects will be selected to meet the needs of the individual regardless of skill level. Emphasis in this course will be placed on safety and proper tool use as well as quality of woodworking projects. Students will be provided with the basic materials required and additional materials may be purchased at cost. This course may be taken twice for credit.

Survey of Technology I, Survey of Technology II, and Woodworking Technology provide students with the opportunity to demonstrate proficiency in the following Career and Education Development Graduation Standards:

- 1. Self-Knowledge And Interpersonal Relationships**
- 2. Education, Career, And Life Roles**
- 3. Making Decisions, Utilizing A Planning Process, Creating Opportunities And Making Meaningful Contributions**

Architectural Drawing and Design

One semester: 1/2 credit

Recommended year: grades 9-12

This course will be a combination of the elements of architectural and design drawing. Emphasis will be on the design and architectural study of residential houses and types of technical drawings used in the world of work. Floor, elevation, plot, and foundation drawings as well as machine, structural and working drawings will be analyzed. Historical elements of design and function will be studied. Work will be done primarily on laptop computers using a variety of software. Accuracy, technique, and neatness will be emphasized.

Computer Assisted Drafting (CAD)

One semester: ½ credit

Recommended year: grades 9-12

This course is designed to guide the student through computer applications in drafting techniques and to develop these talents and skills. Work will be done primarily on laptop computers using a variety of software. CAD is an ideal course for the student contemplating post-secondary engineering, design, or computer-related study.

Small Boat Design

Prerequisite: Survey of Technology or previous experience with woodworking or boats

One semester: 1/2 credit

Recommended year: grades 10-12

This course of study is designed for students studying boat building using traditional and modern materials. Students will study basic small boat drawings and will construct a model or half model based on the lines of the boat. Projects may include small craft construction, maintenance and repairs as well as designing and shaping a paddle or an oar.

Architectural Drawing and Design, Computer Assisted Drafting, and Small Boat Design provide students with the opportunity to demonstrate proficiency in the following Visual and Performing Arts Graduation Standards:

- 1. Disciplinary Literacy**
- 3. Creative Problem Solving**
- 4. Aesthetics and Criticism**
- 5. Connections**

Architectural Drawing and Design, Computer Assisted Drafting, and Small Boat Design provide students with the opportunity to demonstrate proficiency in the following Career and Education Development Graduation Standards:

- 1. Self-Knowledge And Interpersonal Relationships**
- 2. Exploring Education, Career, And Life Roles**
- 3. Making Decisions, Utilizing A Planning Process, Creating Opportunities And Making Meaningful Contributions**

Introduction to Robotics

One semester: 1/2 credit

Recommended year: grades 9-12

This course is designed for any student who has a strong interest in mechanical applications and how they work. Students need to be computer proficient and enjoy creating mechanical process from abstract ideas. Students will develop processes using the concepts of simple machines, techniques and a variety of control devices to implement these simple machines. Students will also study the basics of PLC (Programmable Logic Controller) and how PLC's influence the industrial environment. Students will learn to write simple computer programs that can be used to control the processes.

Advanced Robotics

Prerequisite: Introduction to Robotics

One semester: 1/2 credit

Recommended year: grades 9-12

This course is intended to advance the study of robotics for students who have developed a strong interest in programmable remote controls particularly as they might apply to industry. Students will take basic concepts learned in Introduction to Robotics and begin applying them to advanced problem solving. Students will use servos, solenoids, and a variety of other control devices to manipulate simple machines. A major thrust will be placed on writing software and problem solving.

Introduction to Robotics and Advanced Robotics provides students with the opportunity to demonstrate proficiency in the following Science Graduation Standards:

8. Engineering, Technology, And Application of Science

Introduction to Robotics and Advanced Robotics provide students with the opportunity to demonstrate proficiency in the following Career and Education Development Graduation Standards:

- 1. Self-Knowledge And Interpersonal Relationships**
- 2. Exploring Education, Career, And Life Roles**
- 3. Making Decisions, Utilizing A Planning Process, Creating Opportunities And Making Meaningful Contributions**

Home Improvement

One semester: 1/2 credit

Recommended year: grades 10-12

This course is designed to help students better maintain a home or apartment and to be able to perform simple repairs. It is open to anyone, although the prior classes Woodworking Technology and Survey of Technology will be helpful. This course includes basic small building construction. Repairs will range from roofing and sheet rocking to basic plumbing and simple wiring.

HEALTH and PHYSICAL EDUCATION

Health and Physical Education are an integral part of the total educational program and together work to promote individual student wellness. The health program is designed to develop students' understanding of health by increasing their knowledge and awareness of the factors and choices that promote healthy living. The goals of the physical education program are the development of competence, confidence and persistence. We hope to encourage students to pursue physical fitness for a lifetime. The health and physical education programs draw on knowledge from the physical, biological, and behavioral sciences. Students must complete one credit of physical education and one half credit of health. For additional information on the Health Education and Physical Education MLR standards please visit the following website:

http://www.maine.gov/education/lres/pei/he_pe102207.pdf

Starting with the graduating class of 2018 all students must demonstrate proficiency in the following Health Education and Physical Education Graduation Standards:

Health Standards:

- 1. Health Concepts**
- 2. Health Information, Products, And Services**
- 3. Health Promotion And Risk Reduction**
- 4. Influences On Health**
- 5. Advocacy, Decision-Making And Goal-Setting Skills**

Physical Education Standards:

- 1. Movement/Motor Skills and Knowledge**
- 2. Physical Fitness Activities and Knowledge**
- 3. Personal And Social Skills and Knowledge**

For additional information on the Health Education and Physical Education Graduation Standards please visit the following website: <http://www.maine.gov/doe/proficiency/standards/health-physical-education.pdf>

Health CP

One semester: 1/2 credit

Recommended year: grades 9 - 10

Students will learn basic information and develop an understanding and appreciation of a lifestyle that promotes good health. The units addressed include personal and mental health, nutrition, growth and development, substance abuse, disease control and prevention, safety, environmental health, community health, and consumer health.

Health CP provides students with opportunity to demonstrate proficiency in the following Health Education Graduation Standards:

Health Education

- 1. Health Concepts**
- 2. Health Information, Products, And Services**
- 3. Health Promotion And Risk Reduction**
- 4. Influences On Health**
- 5. Advocacy, Decision-Making And Goal-Setting Skills Skills**

Physical Education

- 1. Movement/Motor Skills And Knowledge**
- 2. Physical Fitness Activities And Knowledge**
- 3. Personal And Social Skills And Knowledge**

Physical Education

One semester: 1/2 credit

Recommended year: grades 9-10

This class is designed for all interests and ability levels. Activities include group sports, lifelong fitness activities, and individual programs. The majority of the grade is based on preparedness for class, including changing up and participation. Physical education may be taken more than twice for credit.

Advanced Physical Education

Prerequisite: Two (2) semesters of physical education

Full year: 1 credit

Recommended year: grades 11-12

This is an elective course for those who are interested in improving their skills in the activities offered in fall and spring physical education courses.

Women and Weights

One semester: 1/2 credit

Recommended year: grades 9-12

This is an elective course for those women who are interested in an opportunity to acquire basic knowledge and skills in weight training that may be used in physical fitness pursuits today and as well as later in life. Students will be physically active in every class. This half credit course will count towards the required physical education credit. Various principles, methods, and techniques of weight training will be introduced to the students. It may be taken twice for credit.

Men and Weights

One semester: 1/2 credit

Recommended year: grades 9-12

This is an elective course for those men who are interested in an opportunity to acquire basic knowledge and skills in weight training that may be used in physical fitness pursuits today and as well as later in life. Students will be physically active in every class. This half credit course will count toward the required physical education credit. Various principles, methods, and techniques of weight training will be introduced to the students. It may be taken twice for credit.

Lifelong Wellness

One semester: ½ credit

Recommended year: grades 9-12

The focus of this course is to develop an appreciation of a lifestyle that promotes good health. The emphasis is on proper nutrition and daily physical activity in order to improve one's overall state of wellbeing. This half credit course will count toward the required physical education credit. It may be taken twice for credit.

Physical Education, Advanced Physical Education, Women and Weights, Men and Weights, and Lifelong Wellness provide students with the opportunity to demonstrate proficiency in the following Physical Education Graduation Standards:

- 1. Movement/Motor Skills And Knowledge**
- 2. Physical Fitness Activities And Knowledge**
- 3. Personal And Social Skills And Knowledge**

Mid-Coast School of Technology

2014-2015 Course Descriptions

Career and Technical Education programs are available to all students in the region. Students acquire high-quality technical skills that will prepare them for post-secondary education and entry into the workplace. Many of MCST's programs provide opportunities for a certification, such as EMT and/or enable the student to earn college credits while in high school. Students and parents are encouraged to contact their guidance counselor or the School to Career Coordinator at your sending school to schedule a visit. Please see our website for more program information:

<http://midcoast.mainecte.org/> or call MCST Student Services at 594-2161 for more information.

Articulation Agreements

Career and Technical High Schools in Maine have a variety of Early College opportunities for students. Many of the CTE programs have negotiated agreements with Maine colleges that allow students to receive college credit for documented achievement in high school programs. Listings of MCST's articulation agreements can be found throughout this course guide. The number of college credits granted varies depending on program and college chosen.

Dual Enrollment

Mid-Coast School of Technology has partnered with several Maine Community Colleges to offer students the opportunity to earn college credit in CTE programs. MCST instructors serve as adjunct faculty members for the partnered post-secondary organization. After a student has successfully completed the course, he or she will earn transferable college credits. Students can earn up to 5 ½ college credits in a MCST program.

Escrow Credits

Escrow credit becomes available when a student satisfactorily completes the secondary CTE program and then requests the community college credit, once s/he is matriculated and has satisfied the community college requirements to complete the articulation.

Academics

Grades 10-12

Algebra I and II and **Geometry** are courses offered at MCST to facilitate the understanding of math topics in work related fields. All three math courses use the computer based, independent skill developing program ALEKS. Real world problems and labs, as well as lectures and experiments, teach students the skills and hands-on applications of these topics.

MCST offers courses in social studies that are designed for students to understand their world. **US History I** is designed to help students understand the beginnings of our American nation through the Civil War period. **US History II** covers the post Civil War period to the present. **American Government** focuses on federal, state, and local government. **Economics** provides knowledge of economic principles and the impact on everyday life. Students learn by using videos, projects, worksheets, etc. Literary selections and *Current Events*, a magazine, are a basic part of each course.

Technical Communications I, II, and III are courses that prepare students to enter the work force and have them experience the types of communications they may need for employment. Students learn about written communication (resumes, cover letters, memos, email, reports and presentations) as well as verbal and non-verbal communication. The class relies heavily upon computer use. Class assignments are frequently based on topics from trade areas. Students receive English credit upon successful completion of a course.

Automotive Collision

Grades 10-12

This course offers a diverse look into the automotive collision industry and prepares students for post-secondary education or entry-level positions within the field. Working in a modern collision shop environment, students use the most up-to-date tools and equipment where students will be expected to learn skills in welding, paint preparation, dent repair, detailing, etc.

Certifications

I-CAR

NATEF (Pending)

Automotive Technology I & II

Grades 10-12

Automotive Technology is designed for students to gain an understanding and learn to repair different systems in today's cars: steering and suspension, brakes, engines and engine performance, electrical, heating and A/C, automatic transmission, and manual drive train. Students also learn how an auto shop works with an emphasis on safety and environmental impact. Students develop on-the-job skills of tool and equipment use along with computer information in the automotive industry focusing on promoting safe work habits and quality workmanship. The instructor is ASE (Automotive Service Excellence) certified.

Certifications

NA3SA Certification

NATEF (Pending)

Articulation Agreements

Central Maine Community College – 6 Credits

Southern Maine Community College – 3 Credits

Baking & Pastry

Grades 10-12

Introductory [pastry](#) and baking classes provide students with an understanding of the ingredients and methods used in creating breads, pastries, cookies and other desserts. Students learn how

dairy, fruits, flour and chocolate come into play with pastry and baking. The fundamentals of dough and basic decorating skills are covered, and this pastry and baking class also introduces students to baking equipment and baking costs. The instructor holds National Board Certification.

Certifications

ServSafe – Food Sanitation

Articulation Agreements

Central Maine Community College
Eastern Maine Community College
York County Community College
Washington County Community College

Certified Nursing Assistant

Grades 11-12

The Certified Nursing Assistant course is a one-year program, which upon completion enables the student to sit for Maine CNA certification. The class consists of two-to-three days of academic study and two-to-three days of clinical practice in local nursing facilities. Upon completion of the program and placement on the Maine State Certified Nursing Assistant Registry, the student will be able to work in a variety of health care settings. The CNA course also offers a solid foundation for further education in the health care field.

Pre-requisite: Students must be 17 years of age before May of the school year in which the class is taken.

Certification

Maine State CNA license

Culinary Arts

Grades 10-12

The chef-based portion of the program is designed to prepare students who wish to enter the competitive field of professional cooking. The program is an overview of the basics in culinary techniques, such as measurement, following formulas, understanding nutrition, and proper knife handling and use. Proper safety and sanitation in the food service industry is emphasized.

Certifications: ServSafe – Food Sanitation

Articulation Agreements

Central Maine Community College – 3 Credits
Eastern Maine Community College – 3 Credits
Southern Maine Community College – 3 Credits
York County Community College – 3 Credits
Washington County Community College – 3 Credits

Design/Technology

Grade 10-12

Movies, music, and video games are part of today's life style; everybody experiences these things. This is why the world needs designers. Design Tech moves students from consumers of media to creation. The courses offered include **Graphic Design, Web Design, TV/Film Production, Audio Production, Concept Design, 3D Modeling & Animation, Stop Motion Animation, Video Game Design, Digital Photography, Lighting Design and Scenic Design**. Students work with real clients on real projects with real deadlines. This is critical not only to developing experience with real-world

working conditions but also in building a portfolio that is essential to getting a job or into a college program in design.

Articulation Agreements

Southern Maine Community College - 9 Credits

Dual Enrollment Agreement

Central Maine Community College - 6 Credits

Eastern Maine Community College

EMT

Grades 11 -12

The Emergency Medical Technician (EMT) program studies the human body and prepares students to help people who are sick or injured. As a part of the course, the student will spend time riding with ambulance services and working in emergency rooms in the area, assisting with patient care. Emergency care skills are practiced in the classroom. This program is a great start for anyone thinking about going into the medical field. This program will be offered in the afternoon session only.

Pre-requisites: students must be 16 years of age before beginning classes.

Certifications

EMT-B license

Articulation Agreement

Kennebec Valley Community College – 3 Credits

Dual Enrollment Agreement

Eastern Maine Community College – 5 ½ Credits

Engineering

Principles of Engineering

Grades 10-12

An introductory course exploring basic engineering principles in an applied hands- on format; including mechanics, heat loss/gain energy transfer, basic electricity, pneumatic and hydraulic systems, statics, dynamics, strength of materials, material testing, structural design, truss design, robotics, PLC (Programmable Logic Controllers) programming, the engineering design process, and failure analysis. Students completing all projects with a “B” or better will have the option of dual enrollment for college credit.

Pre-requisites: Algebra 1, Geometry

Articulation Agreement

Southern Maine Community College – 3 Credits

Civil Engineering and Architecture

Grades 10-12

IED/CEA CAD (Introduction to Engineering Design/Civil Engineering and Architecture)

An introductory course into CAD (Computer Aided Design) using industry standard 3D solid modeling software, Autodesk Inventor and Revit, BIM (Building Information Modeling) software, and surveying fieldwork. Students will design, model, assemble, and fabricate pieces using Autodesk Inventor and a Dimension 3D printer. Students will learn about zoning and building codes, use Autodesk Revit to design a residence, and a commercial project, use surveying equipment, and produce design drawings.

Firefighting

Grades 11-12

The firefighting program teaches basic firefighting skills used in fire service. As a part of the program students will extinguish vehicle, propane and structure fires. Students will learn skills using fire fighting tools, safety procedures, etc. The program prepares students for a career in public safety or to work in the community as a volunteer. This program will be offered in the morning session only. Interested applicants should be aware that this program requires a commitment outside the regular school day for training (some evenings & weekends).

Pre-requisites: Students need to be 16 years old at the start of the school year in which they enter the program.

Certifications

State of Maine Fire Fighting Certification - Firefighter 1 & 2

Dual Enrollment Agreement

Eastern Maine Community College – 3 Credits

Introduction to Applied Technology I

Grade 9-10

Introduction to Applied Technology is a hands-on, project-based program that, through classroom participation and the shop lab, students develop specific academic, career, interpersonal and technical skills that are essential for success in a chosen MCST program as a Junior or Senior. Students experience parts of other school programs through projects using small engines, welding, carpentry skills, etc. The program enables students to explore a wide variety of career and occupational areas. Upon successfully completing the program, students can choose another program as a junior or senior. Flexible scheduling is offered.

Machine Shop

Grades 10-12

Gears, nuts, bolts, screws form the basis of machines, and the Machine Shop program is designed to teach students how to use and make parts. Students experience that Machine Shop is the heart of manufacturing. They learn how to use tools and machines to shape, create and form metal into functioning pieces of machinery. The course also prepares students for post secondary education or to directly enter the work force.

Articulation Agreements

Central Maine Community College
Northern Maine Community College
Southern Maine Community College – 4 Credits
Kennebec Maine Community College

Dual Enrollment Agreement

Central Maine Community College – 4 Credits

Marine Technology

Grades 10-12

Marine Technology prepares the student for a successful career in the marine industry. Boatbuilding basics include both traditional and modern construction techniques from woodworking to resin infusion. The program focuses on providing a clear understanding of the boatbuilding process. Strong emphasis is placed on modern materials, methods, and techniques. Special priority is given to safety, safe work habits, and proper personal protection. Students are encouraged to build or repair a vessel of their own.

Medical Science For Health Occupations

Grades 10-12

The Medical Science for Health Occupations course is designed for students who are interested in pursuing a career in the health care field. The course integrates anatomy and physiology and advanced biology and explores the role of ethics. This “hands on” applied course consists of skills lab, career exploration, medical field projects and integrated research projects. This program prepares students for careers or post-secondary programs related to the health care field.

Articulation Agreement

Southern Maine Community College – 3 Credits

Beal College – 6 Credits

Dual Enrollment Agreement

Central Maine Community College – 3 Credits

Residential Construction

Grades 10-12

This program is designed to introduce students to the skills necessary to succeed in the construction industry. The hands-on portion of this program is where students learn the basics in building construction. Students will have the opportunity to do some of the following: use hand and power tools, basic house framing and construction, roofing, inside and outside finishes, window and door installation, and reading blueprints. The instructor and program are certified through NCCER.

Certifications

10 hour and 30 hour OSHA card

NCCER Certification and National Registry

Articulation Agreements

Eastern Maine Community College – 7 Credits

Central Maine Community College – 1 Credit

Dual Enrollment Agreement

Eastern Maine Community College

School to Career Program

The goal of the School to Career (STC) program is to assist students in making appropriate choices and plans for their education/career paths during and after high school. The philosophy of this program recognizes that classroom learning provides only part of the skills and knowledge students will need to succeed in their chosen profession or career.

Cooperative Education

Grades 10-12

Up to 1 applied academic credit. Students are eligible to earn a maximum of 2 credits for work experiences during high school.

Through this program high school students earn credit for paid, supervised work in the community. A State of Maine Cooperative Education Agreement among the parent(s), student,

school and employer is completed at the beginning of the year. Employers/ supervisor evaluate work ethic, on the job skills, and workplace responsibilities. Number of hours worked varies, but students generally work an average of 10 - 15 hours per week. Students must provide their own transportation to and from the job site.

Pre-requisites:

Students must be 16 years old and have a job.

Students must have taken or be enrolled in the Career Exploration Class

Career Exploration Class

Grades 10 - 12

.5 credit (applied academic)

This course is a required for participation in the Cooperative Education Program. Students not enrolled in Cooperative Education are eligible to enroll in this course.

This course helps students learn the decision making process for education and career choices during high school and beyond. Class activities focus on the development of work-ready skills, which are essential for success in today's workplace. Students explore the answers to self-defining questions: "Who am I", "Where do I want to go?", "How do I get there?"

Certifications

WorkReady™ Certificate

Small Engine Technology

Grades 10-12

Lawn mowers, snow throwers, ATVs and other power and recreational equipment make our lives easier and more enjoyable. This course offers students a solid foundation of small engine operation and repair. Students learn the basics that an entry-level technician needs to gain employment or to further their education in order to turn a job into a career. This course helps students learn problem-solving abilities along with a thorough knowledge of the use of shop manuals and online research. Due to the increasing complexity of small engines in general, most employers prefer to hire technicians who graduate from formal training programs. At the discretion of the instructor, students are encouraged to bring in their own projects as long as they align with the curriculum and instructional goals,

Certifications

EETC Certificates – Equipment and Engine Training Council

Welding/Fabrication I & II

Grade 10-12

This two-year program provides a foundation in welding safety and conventional stick welding required for entry-level metal fabrication. Additional industrial welding skills are covered as well. Also included are skills for cutting metal using a variety of methods and machines. First year students learn the skills needed for two types of welding. Second year students expand on their welding knowledge and skills with three additional welding processes. In addition, second year students who have shown significant progress with the welding process will be able to work with the industrial welding robot.

Certifications

Certified Welder AWS (American Welding Society)

Articulation Agreements:

Central Maine Community College – 3 Credits

Southern Maine Community College – 3 Credits

Dual Enrollment Agreement

Eastern Maine Community College – 3 Credits

