GORHAM HIGH SCHOOL
Program of Studies
2025-2026

INTRODUCTION TO THE PROGRAM OF STUDIES

The Program of Studies is created to assist students in planning their academic program at Gorham High School. Course selections should be made carefully as part of a four-year plan designed to meet post-secondary goals. Special attention should be given to the course descriptions, course levels, prerequisites and the amount of credit given per course. Each student is required to earn a minimum of five academic credits each year, and students are encouraged to take courses that challenge them and help them achieve their academic and post-secondary goals.

STUDENT SUPPORT SERVICES

The Gorham High School Student Support Services team believes that each student is unique in his or her academic, personal, social, and career development. GHS School Counselors are dedicated to supporting students navigate the high school experience and begin planning for their futures.

The contact number for the Student Support Services Office is (207) 222-1102.

Students are assigned to a counselor based upon the following alpha-split:

Counselor	Class of 2029	Class of 2028	Class of 2027	Class of 2026
Anastasoff	A-D	A-D	A-D	A-C
Teixeira	E-K	E- K	E-L	D-LES
Cherry	L-P	L-P	M-R	LEV-R
Stevens	Q-Z	Q-Z	S-Z	S-Z

GRADUATION REQUIREMENTS

Students must earn twenty-two (22) credits to graduate from Gorham High School.

These twenty-two credits must include the following:

English	4.0 credits	Physical Education	1.0 Credit
Mathematics	3.0 credits	Fine Arts *	1.0 Credit
Science	3.0 credits	Health**	0.5 Credits
Social Studies	3.0 credits	Electives***	5.5 Credit
Technology	1.0 credit		

*Students can take music or art classes to fulfill this graduation requirement.

*Beginning with the **Class of 2027** students must earn 1 credit of Health and 5 elective credits for a total of 22 credits to graduate

***Students graduating with the Class of 2025 or 2026 need to earn at least 5.5 elective credits. Beginning with the Class of 2027, students must earn a minimum of 5 elective credits.

COMMUNITY SERVICE

Students must accumulate twenty hours of community service as a high school student in order to participate in graduation ceremonies. Students must file completed community service forms in the Guidance Office (forms can be accessed on the GHS website or downloaded here). The Guidance Office will record each students' community service hours online in Infinite Campus. This requirement must be completed by the end of May of the senior year. Community service is not required to earn a diploma.

GRADE REPORTING

A = 93 - 100 B = 85 - 92 C = 78 - 84 D = 73 - 77 F = Below 73

WP = Withdraw Pass WF = Withdraw Fail

ACADEMIC HONORS

Latin Honors

Students earn the following Academic Honors based upon their grade-point average (GPA) for all credits earned through seven (7) semesters of high school; credits must be earned at an accredited high school.

Cum Laude	93 - 94.999
Magna Cum Laude	95 - 97.999
Summa Cum Laude	98 and above

Please note: GPAs are not rounded up for Latin Honors designations.

Honor Roll

At Gorham High School, we recognize academic excellence each quarter through our Honor Roll.

Eligibility Requirements:

- Students must be enrolled in a full academic program (at least five graded courses).
- To qualify for Honors, a student must earn a grade of 85 or higher in every course.
- To qualify for High Honors, a student must earn a grade of 93 or higher in every course.

Publication:

- The Honor Roll is published quarterly, approximately three weeks after the grading period ends.
- It is posted at Gorham High School and submitted to The Gorham Times and The American Journal for public recognition.

SCHEDULE CHANGES

The GHS Student Support Services Department holds an add/drop period during the first two weeks of each semester.

After the add/drop period, students are strongly discouraged from withdrawing from courses. Students will make a good-faith effort to seek academic support for the course in question. For example, the student should show they have met with the teacher for additional support. If it becomes necessary for a student to consider a schedule change, the student must:

1. Discuss the change with his or her teacher(s), school counselor, and parent(s)/ guardian(s).
2. Complete a Withdrawal Form when a change is warranted and obtain all required signatures.
3. Return the Withdrawal Form to the appropriate school counselor who will make the changes to the schedule.
4. Students must follow their original schedule until the course withdrawal has been processed.

For course withdrawals made after the add/drop period, but within the first five weeks of the term, a grade of W will be posted for the quarter and will show on the grade report.

For course withdrawals made after the first five weeks of the term, a grade of WP or WF* will be posted for the quarter and for the final grade and will show on the grade report and the student transcript. If the student is passing the course at the time of withdrawal, a WP grade will be assigned. If the student is failing the course at the time of withdrawal, a WF grade will be assigned. A grade of WF or WP is not counted in the student GPA.

**Please note any student with a WP or WF on their report card will be excluded from Honor Roll for that quarter.*

STANDARDIZED TESTING

Testing at GHS	**Year**	**Month/Term**
NWEAs (MEA)	Freshmen and Sophomores	Fall & Spring
PSAT/NMSQT	Junior	Fall
Science Augmentation	Junior	Spring

Gorham High School does not offer the School Day SAT. Students interested in taking the SAT should visit the College Board website for a list of Saturday dates and testing centers in our area. If students need support registering for a Saturday SAT, they are encouraged to meet with their school counselor.

SAT Resources:
Digital SAT Registration & Saturday testing dates
What to bring to an SAT
List of Test Optional & Test Free Colleges

CREDIT RECOVERY OPTIONS

Gorham High School offers the following options for students who have failed a core course and are motivated to recover the lost credit to stay on track for graduation.

Edmentum: The computer-based Edmentum Courseware will be used at Gorham High School primarily as a credit recovery opportunity for students who have failed a quarter or two or for students who have, for whatever reason, missed a portion of a semester of school. Students who need to make up learning from a quarter or semester will work with their teacher(s) and their school counselor to sign up for an Edmentum course. Upon successful completion of the Edmentum course, the content area teacher will change the failing quarter grade to a 73.

Summer School: Students who fail a class for the year with an average of 60 or above and who have an 80% attendance rate or higher may elect to attend summer school to recover the credit (unless a student has already utilized Edmentum Courseware for two quarters for the course during the school year). Summer school options may also be available at area high schools; GHS may also offer a summer school option if the budget allows for it. Students are responsible for all fees and transportation. Students may not accrue more than four summer school credits.

CHALLENGE BY CHOICE

Students benefit from engaging in the most rigorous and challenging coursework they are prepared to undertake. Students are encouraged to push themselves academically, fostering resilience, critical thinking, and a strong work ethic that will serve them well in future academic and career pursuits. While teachers provide course recommendations based on a student's prior performance and demonstrated skills, we recognize that motivation, determination, and a willingness to seek support are also key factors in success. Therefore, students who wish to enroll in a more advanced course than recommended are supported in their decision provided they understand the expectations and commit to more rigorous expectations. Our goal is to cultivate a culture of high expectations and continuous growth, ensuring that every student is empowered to reach their fullest potential.

PROGRAM OF STUDIES

POST SECONDARY PREPARATORY PROGRAM PATHWAYS

Grade	English	Social Studies	Math	Science	World Language	Electives *Diploma Req.
9	English 9 (Honors Challenge Option)	World History 1 (Honors Challenge option)	Algebra 1 Geometry Adv.	Earth Space Science Adv. Earth Space Science	World Language 1 (Spanish, French, Latin)	PE 1 Fitness for Life Fine Arts/ Technology
10	American Studies (Honors Challenge Option) American Lit. Adv.	American Studies AP US History	Geometry Geometry Adv. Algebra 2 Algebra 2 Adv.	Biology Biology Advanced	World Languages 1 or 2	Health PE 1 or PE 2 Fine Arts/ Technology
11	English 11 English 11 Adv. English 11 AP Language/Comp. Semester course options	2 Semester History Courses AP Modern World History	Algebra 2 Algebra 2 Adv. Financial Algebra Pre-Calculus Pre-Calculus Adv. Statistics AP Statistics	Chemistry 1 Chemistry 1 Adv. General Chemistry & General Physics Adv. Physics AP Environmental Science AP Biology Anatomy & Physiology 1 Marine Science	World Languages 1 or 2 or 3	PE 1 or PE 2 Fine Arts/ Technology CTE Program Electives

12	English 12 English 12 Adv. English 12 AP Literature/Comp. Semester course options	Electives	Financial Algebra Pre-Calculus Pre-Calculus Adv. Statistics AP Statistics Calculus AP Calculus AP Computer Science.	Anatomy & Physiology2 Physics Adv. Physics Chemistry 2 Adv. (with AP option) AP Environmental Science Marine Science	World Languages 1 or 2 or 3 or 4	PE 1 or PE 2 Fine Arts/ Technology CTE Program Electives

ENGLISH

Freshmen Program

110 English 9 **1 Credit**

The course is designed to build students' foundational skills in academic reading, writing, speaking and listening, and research. Students will read shared texts as well as independently selected materials. In addition, students will engage in literature circles, which focus on elements of fiction and social justice. All freshmen will explore the research process through an I-Search project and will learn to write structured academic essays including a five-paragraph essay. The course includes vocabulary and grammar study.

English 9 Honors Challenge Option: While the English 9 curriculum is designed to provide a rich and rigorous academic experience for all students, some 9th graders may wish to expand their knowledge and skills even further. This option enriches the student's understanding of English by reading additional or more challenging books and completing more complex assignments. Honors challenge is particularly appropriate for students who plan to take American Literature Advanced as sophomores. Successful completion of the program will lead to an Honors Challenge designation on the student's transcript. Students are expected to complete a graded summer assignment.

Sophomore Program

425E American Studies English **1 Credit**

This is a college preparatory course often taken in conjunction with American Social Studies. Students will have the opportunity to engage in interdisciplinary learning combining American Literature and U.S. History. Major works of literature may include *Kindred, The Things They Carried,* and *Feed*. The writing curriculum will focus on developing students' writing skills, focusing primarily on analytical writing, but also will include narrative and research writing. Students are expected to complete a graded summer assignment.

Prerequisite/Notes: Successful completion of English 9.

126 American Literature Advanced **1 Credit**

This is a challenging and comprehensive survey of American Literature for students who have an interest and aptitude in reading and writing evidenced by prior performance in English 9. Students will study works such as *The Scarlet Letter, Winesburg, Ohio, To Kill a Mockingbird, The Great Gatsby, Slaughterhouse Five, The Things They Carried,* and *Sing Unburied Sing*. In addition to developing analytical reading skills, students will continue to work on analytical writing and thinking. This course may be paired with AP American History. Students are expected to complete a graded summer assignment

Prerequisites/Notes: Successful completion of English 9. Teacher recommendation.

Junior & Senior Program

In 11th and 12th grades, students may take EITHER a year-long, grade-level-specific course OR two semester-long, genre-based courses to earn the required credits for English. Students may not take both of their required courses in the same semester.

Year-long Junior & Senior Courses

140 English 11 **1 Credit**

This course is designed for students who need continued support with the reading and writing processes. Reading selections will be drawn from a mix of contemporary fiction and nonfiction. Reading may include core texts as well as independently selected materials. Students will engage in writing, the research process, and informal and formal presentations and discussions. Shared texts may include: *The First Part Last, The Other Wes Moore, The Curious Incident of the Dog in the Night-Time, Hole in My Life,* and *The Last Lecture*.

Prerequisites/Notes: Successful completion of American Studies English.

145 English 11 Advanced **1 Credit**

This course includes a range of reading and skills in a college preparatory curriculum with nightly homework. Writing emphasizes analysis but also includes research and narrative writing. The course also includes SAT preparation and support, vocabulary building, and grammar geared toward the SAT verbal. Students will complete a major argumentative research paper. Texts may include *Macbeth, Lord of the Flies, The Curious Incident of the Dog in the Night-time, And Then There Were None,* and *The Other Wes Moore*. Students are expected to complete a graded summer assignment.

Prerequisites/Notes: Successful completion of American Studies English and teacher recommendation.

150 English 11 Advanced Placement (AP) Language/Composition **1 Credit**

The course will focus on writing for distinct purposes, the essentials of rhetoric and essay structure, and is designed for students who have demonstrated a strong aptitude for reading and writing. The curriculum includes narrative and analytical writing and an 8-10 page argumentative research

paper. Texts may include *Heart of Darkness, One Flew Over the Cuckoo's Nest, On Writing* as well as sections from *The Bedford Reader* and various journals and periodicals. By mid-September, each student must submit a $40 deposit for the AP exam registration. If there are financial concerns, students should contact the building principal. Students are expected to complete a graded summer assignment.
Prerequisites/Notes: Successful completion of American Studies English and teacher recommendation.

160 English 12 **1 Credit**
This course is designed for students who need continued support with the reading and writing processes. In this course students will have the opportunity to explore a variety of literary styles and genres. Students will write personal and analytical essays and will complete a research project. In addition to student choice reading, class texts may include *Speak, Death of a Salesman, Into the Wild, Hole in My Life, Angela's Ashes, Long Way Gone and The Kite Runner*. Students are expected to complete a graded summer assignment.
Prerequisites/Notes: Successful completion of English 11.

165 English 12 Advanced **1 Credit**
This course requires students to read and analyze multicultural literature with a specific focus on preparing students for college-level writing. Students will write and revise college essays to begin the year. Students will also write analytical essays, which will incorporate argument and critical literary analysis. The curriculum includes an intense research paper focusing on biography. Literature may include *Death of a Salesman, A Midsummer Night's Dream, Into the Wild and The Kite Runner* as well as a selection of literary nonfiction. This course also requires independent choice reading. Students are expected to complete a graded summer assignment.
Prerequisites/Notes: Successful completion of English 11, English 11 Advanced, or English 11 Advanced Placement, and teacher recommendation.

170 English 12 Advanced Placement (AP) Literature/Composition **1 Credit**
AP English Literature and Composition engages students in the reading of literature from a variety of periods. Students will further develop the ability to read, interpret, analyze and critique literature.
In addition, students develop college-level composition skills. Literature may include *In the Time of the Butterflies, Cat's Cradle, A Room With a View, Hamlet, and Citizen* as well as a wide selection of poetry and literary nonfiction. By mid-September each student must submit a $40 deposit for the AP exam registration.If there are financial concerns, students should contact the building principal. Students are expected to complete a graded summer assignment.
Prerequisites/Notes: Successful completion of English 11 Advanced or English 11 Advanced Placement and teacher recommendation.

Genre-Based Semester Courses for Juniors and Seniors

171 Communication for the Trades **0.5 Credit**
Career readiness includes being able to read, write and communicate verbally. This class will prepare

students who are planning for a vocation directly after graduation. Content will include career exploration research, resume and technical writing skills, and presentation practice aligned with work-place scenarios. In addition, students will engage in choice reading as they develop habits of a successful life-long learning.

135 Creative Writing **0.5 Credit**

This course will provide students opportunities to write in the genres of poetry, fiction, and memoir. Classes will be organized in a workshop format and students will be expected to produce writing on a weekly basis as well as offer constructive feedback to their peers. This course also offers students the opportunities for digital storytelling through the creation of short films, podcasts, and social media projects. A portfolio of work at the end of the semester will include revisions from the weekly writing. Class texts may include T*he Practice of Creative Writing*, *Bird by Bird*, *The Penguin Book of the Modern American Short Story*, and *The Penguin Anthology of Twentieth Century American Poetry*. This course also requires independent choice reading. Opportunities and resources will be available for students who wish to send out their work for publication.

790 Dual Enrollment Public Speaking **0.5 GHS Credit / 3 USM Credits**

This class will create a supportive environment that will allow all students to develop public speaking skills. From group discussion to formal speeches, this class will give an introduction to basic concepts of oral communication. Students will give a series of speeches throughout the semester, varying in topic and complexity. In this dual enrollment course, students have the opportunity to earn college credits upon successful completion. Students must register through ExplorEC in order to be approved for the early college credits associated with this course.

172 Journalism and New Media **0.5 Credit**

In this course students will read and analyze newspapers, magazines, podcasts, YouTube content, and multimedia sources to gain a better understanding of modern journalism. Students will consider the Journalistic code of ethics as it pertains to our own work as well as the American media landscape. Students will write articles, make YouTube content, create podcasts, and produce multimedia works to publish an online magazine. Class texts may include *High School Journalism: A Practical Guide*, *On Writing*, *John Henry Days*, and *Killers of the Flower Moon*. This course also requires independent choice reading.

176 Literature and Film **0.5 Credit**

This course will explore the dynamic interplay between page and screen with cross-media comparisons and the analysis of literature and film. Students will read a variety of literary works and their film adaptations, sparking discussion and analysis of themes, authorial and directorial choices, aesthetic similarities and differences, and how we as readers (and watchers) assign value and worth to both literature and film. Students will be expected to do both reading and viewing outside of class. Potential works may include but not be limited to: *The Shawshank Redemption* by Stephen King, *The Perks of Being a Wallflower* by Stephen Chbosky, *Passing* by Nella Larsen, *A Man Called Ove* by Fredrik Backman, *Jurassic Park* by Michael Crichton, *Rebecca* by Daphne du Maurier, *The Color Purple* by Alice Walker, *Where the Crawdads Sing* by Delia Owens, *Room* by Emma Donoghue, *All*

The Light We Cannot See by Anthony Doerr, *Heart of Darkness* by Joseph Conrad (*Apocalypse Now).*

177 Mystery and True Crime **0.5 Credit**

This course will explore mystery as a genre through several novels inspired by "The Queen of Crime" Agatha Christie. We'll read several contemporary novels and students will learn how mystery differs from other genres in structure and style. Class activities will include a research presentation theorizing a solution to a modern unsolved true crime. The course comprises course novels, self-selected novels, and literature circles with classic and contemporary mystery texts. Potential works might include: *The Life We Bury* by Allen Eskins, *A Study in Scarlet* by Arthur Conan Doyle, *The Death of Mrs. Westaway* by Ruth Ware, *The Silent Patient* by Alex Michaelides, *The Guest List* by Lucy Foley, *The Woman in the Window* by A.J. Finn, *In the Lake of the Woods* by Tim O'Brien, *The Thursday Murder Club* by Richard Osman, and *Serial* Season 1.

178 Sports Literature **0.5 Credit**

Sports Literature is a semester-long course for juniors and seniors that juxtaposes sports and society. Students will read and examine both fiction and nonfiction texts that center around sports. Novels, essays, columns, and other media will be used to examine the essential question of: what makes sports so compelling to us? And, why are sports so important to human society? Students will be expected to read the two class texts, *One Goal* by Amy Bass and *Friday Night Lights* by Buzz Bissinger, as well as to read two books of their choice. Class will consist of reading, writing, discussion, and presentations, as well as a research component.

FINE ARTS
(Visual and Performing Arts)

701 Art 1A **0.5 Credit**

This is an introductory visual arts course covering techniques in drawing, painting, design and sculpture. Students will solve various creative problems using the Elements of Art and Principles of Design. Included will be exposure to well-known artists and movements, as well as developing the student's appreciation of art. This course is open to students of various art backgrounds in grades 9-12.

703 Art 1B **0.5 Credit**

This course is for students who enjoyed Art 1A and want to continue developing their skills and techniques. Students will creatively solve more advanced drawing, painting, two-dimensional and three-dimensional design problems as well as working with mixed media collage and acrylic painting.

705 Art 2 **1 Credit**

This course is the first full-year art course. A student's interest and motivation in art is the most important consideration in electing this course. The units of instruction and activity expand the design concepts and art principles established in Art 1 A/B into applications of expression and creativity. The student will draw, paint, sculpt and design in both two- and three-dimensional form.

The art experiences will continue the enrichment of each individual and correlate with the individual's goals, interests and abilities.
Prerequisites/Notes: Successful completion of Art 1A and Art 1B.

720 Studio Art **1 Credit**
This is a course designed for students who have a strong interest in art and an ability to work independently in a search for the development of skills, appreciation and understanding. Students will work on more advanced projects which may include a variety of drawing experiences, watercolors, acrylics, printmaking and sculpture problems. It will encourage and challenge the serious student and will require outside assignments as needed. Creative thinking and individual style will be emphasized in the completion of assignments. Art-related careers will be discussed as well as portfolio requirements for college application.
Prerequisites/Notes: Successful completion of Art 2.

725 Studio Plus **1 Credit**
This is a fourth-year course intended for the highly motivated students who are seriously interested in the study of art. Projects will demand a high level of creative thought as well as an in-depth understanding of techniques and media. Emphasis will be placed on the execution and completion of projects, which are of a quality suitable for college. Students who are contemplating an art career will be guided in the development of the art portfolios.
Prerequisites/Notes: Successful completion of Studio Art.

751 Music 1A **0.5 Credit**
Music appreciation is the entry-level music course at GHS. It is designed for students who have a general interest in music but do not wish to perform. Students will learn the elements of music and their application to music literacy and appreciation of many genres of music that include rock, rap, jazz, classical and many others. Exposure to well-known artists and movements will be included as well as developing the student's overall appreciation of music. This course is open to students of various backgrounds in grades 9-12.

752 Music 1B **0.5 Credit**
This course is for students who enjoyed Music 1A and want to continue developing their skills and knowledge. Students will explore more advanced topics in music reading and songwriting as well as an introduction to basic piano and/or guitar.
Prerequisites/Notes: Successful completion of Music 1A.

756 Guitar Lab **0.5 Credit**
Guitar Lap provides an introduction to playing chords and reading music on guitar with an emphasis on practice and rehearsal skills through which students can eventually learn to play on their own. This class is for beginners only.
Prerequisites/Notes: Class limited to 15 students.

766 Piano Lab **0.5 Credit**

No experience required! Learn to read music and play piano through the use of the Adult Keyboard Method. Individual keyboard stations allow students to move at a pace that is appropriate for their learning needs. This class is for beginners only.
Prerequisites/Notes: Class limited to 10 students.

779 Music Theory & Songwriting **0.5 Credit**
Music Theory & Songwriting is designed to teach music theory through the process of digital songwriting. This semester-long course covers the same material that would be taught in the beginning units of a Music Theory I class in most collegiate music departments and helps connect music theory to the genres of music that students listen to on a daily basis. This course will prepare students who intend to take AP Music Theory. Major elements of the course include reading note names on the treble and bass clef staves, rhythm reading, ear training, sight singing and solfege, as well as harmonic and formal analysis. Prior experience in voice, piano or other musical instruments is not required. Successful completion also allows students to enroll in AP Music Theory without prior performance experience in voice, piano or other musical instruments.

780 Advanced Placement (AP) Music Theory **1 Credit**
This is an Advanced Placement music class for seniors. This is a very challenging class and is recommended for highly motivated musicians. Students will continue to learn about chords and ear training, but will learn composition and analysis of music of the common practice period. Students that demonstrate a high musical aptitude may also be eligible. By September each student must submit a $40 deposit for the AP exam registration. If there are financial concerns, students should contact the building principal.
Prerequisite/Notes: Successful completion of Songwriting, Concert Band, Chamber Singers, or teacher recommendation. Recommended for seniors.

730 Concert Band **1 Credit**
Concert Band is open to all students in grades 9-12 who play a band instrument. Throughout the year the ensemble covers a wide variety of quality band literature, performs several concerts and competes at state-sponsored festivals. Band members are eligible to participate in area festivals and audition for the All-State Concert Band or Orchestra. No audition is necessary to be a member of the concert band, but students must have prior experience on their instrument. Attendance at all performances is mandatory.

732 Jazz Band **1 Credit**
Jazz Band is a small, instrumental group made up of students selected and auditioned from the band. The jazz band covers a wide range of advanced instrumental music including dance band/big band arrangements of the 40's up through contemporary pop, rock and jazz arrangements. Improvisation and ensemble playing techniques are also covered. Attendance at all rehearsals and performances is required.

777 Band Lab **1 Credit**
The daily objective of the course is to promote musical growth of students who perform, or want to perform band instruments (flute, clarinet, saxophone, trumpet, horn, trombone, euphonium, tuba,

and percussion.) This includes students who have no band experience, students who played a band instrument in the past and want to begin again, or current band students interested in developing their personal artistry on a primary or secondary instrument. Students will work with the instructor to develop goals for their instrumental musicianship that will be attained over the course of the school year. As a member of the instrumental music program, group effort and cooperation is necessary to be successful. Band is a skilled effort in which each student is expected to show technical and musical growth throughout the year. This course is designed to provide GHS students a pathway to entering the GHS Band program, which provides an enriching and diverse instrumental music education.

013 Chorus **1 Credit**

Open to those interested in singing as a means of expression. Students will study a wide variety of music as well as develop the ability to read and understand vocal music. This is a performance based class and concerts are required.

- The Grace Notes (Treble Choir) - sopranos and altos from grades 9 and 10
- Bella Voce (pronounced Vo-chay) - sopranos and altos from grades 11 and 12
- The Basslines - tenors and basses from grades 9-12

740 Chamber Singers **1 Credit**

The GHS Chamber Singers offers vocally/musically-advanced students the opportunity to perform at a collegiate level. Admission to the group is determined by audition. Besides demonstration of advanced vocal skills, other criteria for acceptance include: dedication, attitude, potential for growth, past performance and participation, and/or a recommendation from another vocal instructor. Required performance opportunities will be extensive, as will the demands on each student.
Prerequisites/Notes: Vocal Audition.

HEALTH & PHYSICAL EDUCATION

810 PE 1 **0.5 Credit**

The focus of the class is on individual fitness. Students will learn and apply the principles of training as they develop their own fitness goals established from baseline fitness assessment scores. Students will apply their learning as they develop their own personal fitness plan and improve their level of fitness through group fitness and weight room training. Students will have an opportunity to participate in a variety team and recreational activities.
Prerequisites/Notes: Recommended for freshmen.

831 Fitness for Life **0.5 Credit**

In this course students will work in a group setting and will engage in a variety of physical fitness activities to improve overall level physical fitness. Students will learn and apply the principles of training as they develop their own fitness goals established from baseline fitness assessment scores. Students will improve their level of fitness through group fitness and weight room training. Students will have an opportunity to participate in a variety of net, racquet, and recreational activities. This course is recommended for a student who is generally less competitive.

Prerequisites/Notes: Recommended for freshmen.

821 PE 2: Racquet, Net Games and Recreational Activities **0.5 Credit**

This course will offer students the opportunity to develop and master the fundamentals, rules, and strategies of tennis, badminton, pickleball, volleyball, and table tennis. Singles and doubles tournaments will be integrated at the end of each unit. Recreational activities may include frisbee golf, spikeball, bocce, golf, cornhole, and kan jam. Emphasis is on the realization that personal health is essential in their adult lives. Every effort is made to modify the class to meet individual needs and learn to play games that students can enjoy as an adult.

Prerequisite/Notes: Successful completion of PE 1 or Fitness For Life.

823 PE 2: Team Sports and Recreational Activities **0.5 Credit**

This course will offer students the opportunity to participate in a wide variety of team sports, including but not limited to flag football, ultimate frisbee, softball, soccer, basketball, floor hockey, and volleyball. Recreational activities may include frisbee golf, spikeball, bocce, golf, cornhole, and kan jam. Emphasis is on the realization that personal health is essential in their adult lives. Every effort is made to modify the class to meet individual needs.

Prerequisite/Notes: Successful completion of PE 1 or Fitness For Life.

800 Health Education 1 **0.5 credit**

This course is designed to examine the many risk behaviors that teenagers may encounter during adolescence. Through the course students will learn how to maintain, reinforce and enhance their personal health, as well as develop lifelong thinking skills related to choosing healthy behaviors. Students will have the opportunity to assess their lifestyle and choices through various class activities and learn how to make informed, educated decisions about health. Areas of study will include personal and community health, substance abuse and addiction, chronic and infectious diseases, nutrition, growth and development, sexual health and basic anatomy and physiology of some organ systems.

- Substance abuse and addition
- Human growth and development
- Relationships
- Mental Health and Wellness

Prerequisites/Notes: Recommended for sophomores.

805 Health After High School **0.5 credit**

This course is designed for juniors and seniors to explore topics related to the transition to adulthood. Students will learn how to enhance their personal health and wellness, develop lifelong skills related to choosing healthy behaviors, building independence, and access community resources. Areas of study may include:

- Current Health Issues
- Financial Wellness
- Nutrition
- Lifestyle Diseases

- Mental Health and Wellness
- Relationships with Healthcare Professionals
- Transition to Adulthood

Prerequisites/Notes: Successful completion of Health 1. Recommended for juniors or seniors.

840 Sports Medicine I Advanced **0.5 Credit**

This course is designed for students in grades 11 and 12 with an interest in fields such as athletic training, physical therapy, orthopedic medicine, fitness, exercise physiology and strength and conditioning. The coursework will focus on the following areas of instruction: First Aid and CPR, emergency procedures, anatomy and physiology, basic prevention, evaluation and treatment of athletic injuries, as well as an investigation into various sports medicine careers. The course will provide students with an opportunity to examine the musculoskeletal system of the human body, as well as learn basic techniques for preventing and treating common athletic injuries.

Prerequisites/Notes: **Successful completion of Biology and Health I and teacher recommendation.**

841 Sports Medicine II Advanced **0.5 Credit**

This course is designed for students who have an interest in studying human anatomy and physiology from an injury perspective following successful completion of Sports Medicine I. The course is specifically designed for students who have an interest in fields such as athletic training, physical therapy, occupational therapy, orthopedic medicine, fitness, exercise physiology and strength and conditioning. The course will provide students with an in-depth opportunity to investigate the joints of the lower extremity of the human body with a focus on musculoskeletal injury. As part of the course students will learn evaluation and management techniques for injuries of the foot, ankle, lower leg, knee, thigh, and hip. In addition, students will learn and practice injury evaluation and documentation skills. The course will require students to work with classmates in a variety of hands-on learning activities that require palpation, range of motion assessment, muscle testing, and special testing of joints.

Prerequisites/Notes: **Successful completion of Sports Medicine I and teacher recommendation.**

MATHEMATICS

210 Algebra 1 **1 Credit**

Algebra 1 focuses on the study of three different patterns: Linear, Exponential and Quadratic. In this course, we will study these patterns through interactive and collaborative work in large and small groups. Outside of class, students will work independently on shorter but similar assignments. All of the patterns studied in this course will be connected to real world applications.

Prerequisites/Notes: Recommended for freshmen.

220 Geometry **1 Credit**

During high school, students begin to formalize their geometry experiences from elementary and middle school, using more precise definitions and developing careful proofs. In this course, topics

include parallel and perpendicular lines, triangle congruence, properties and attributes of triangles, similarity, right triangles and trigonometry, and spatial reasoning.
Prerequisites/Notes: Successful completion of Algebra 1 at Gorham High School.

225 Geometry Advanced **1 Credit**

In this course, students begin to formalize their geometry experiences from elementary and middle school, using more precise definitions and developing careful proofs. Geometric shapes can be described by equations, making algebraic manipulation into a tool for geometric understanding, modeling, and proof. Geometric transformations of the graphs of equations correspond to algebraic changes in their equations. Dynamic geometry environments provide students with experimental and modeling tools that allow them to investigate geometric phenomena in much the same way as computer algebra systems allow them to experiment with algebraic phenomena.
Prerequisites/Notes: Successful completion of 8th grade Algebra 1, GHS Algebra 1, and teacher recommendation.

235 Algebra Modeling **1 Credit**

Algebra Modeling focuses on the study of three different mathematical ideas: Statistics, Linear and Nonlinear patterns. In this course, we will study these ideas through interactive and collaborative work in large and small groups. Outside of class, students will work independently on shorter but similar assignments. All of the patterns studied in this course will be connected to real world applications.
Prerequisites/Notes: Successful completion of Geometry and teacher recommendation.

240 Algebra 2 **1 Credit**

Algebra 2 focuses on polynomial, exponential, rational, and radical functions. Students will solve respective equations and model data for all functions to discover a correlation and relationship that best fits the data. Students will use models to formulate predictions and inferences. In addition to functions, students will complete a statistical analysis unit. Topics studied in Algebra 2 apply to various fields, private sector careers, modeling problems, and applications.
Prerequisites/Notes: Successful completion of Geometry.

245 Algebra 2 Advanced **1 Credit**

Algebra 2 Advanced focuses on independently studying and learning the first three units the summer prior to the start of the course to ensure preparation for the start of the year. This will set the foundation for functions, enhance the study of linear functions, and evolve into the study of linear systems. Once our year together begins, we will set forth on our study of quadratic, polynomial, exponential, logarithmic, rational, and radical functions, solving the respective equations, and modeling data for all of these types of functions in order to discover a correlation and relationship that best fits the data, so that we can then use our model to formulate predictions and inferences. In addition to our study of all things "functions," we will also complete a unit on the study of statistics and basic probability. Everything that we study in Algebra 2 Advanced will be applicable to various fields, private sector careers, modeling problems and applications.

Prerequisites/Notes: Successful completion of Geometry Advanced and teacher recommendation.

Electives

256 Personal Finance **.5 Credit**

Personal Finance will focus on real-world applications from a variety of mathematical topics. We will cover the following topics: budget needs versus wants, the value of money, how to establish credit scores, money management, employment opportunities, budgeting, personal finance, consumer debt (credit cards), vehicle costs, taxes, home and student loans, passive investment, long term savings, and retirement planning. Most of our time will be spent exploring, analyzing, discussing, and making decisions about real-world math modeling problems.
Prerequisites/Notes: Priority will go to seniors.

250 Pre-Calculus **1 Credit**

Precalculus combines concepts of trigonometry, geometry, and algebra that are needed to prepare students for the study of calculus. The course strengthens students' conceptual understanding of problems and mathematical reasoning in solving problems. Facility with these topics is especially important for students who intend to study calculus, physics, other sciences, and engineering in college. The main topics in the Precalculus course are complex numbers, rational functions, trigonometric functions, and their inverses. This course requires students to use definitions and theorems to build arguments and justify conclusions. Teachers and students will regularly use technology to reinforce relationships among functions, confirm written work, implement experimentation, and assist in interpreting results.
Prerequisites/Notes: Successful completion of Algebra 2.

251 Advanced Placement (AP) Pre-Calculus **1 Credit**

In AP Precalculus, students explore everyday situations using mathematical tools and lenses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple representations. They will learn how to observe, explore, and build mathematical meaning from dynamic systems, an important practice for thriving in an ever-changing world. AP Precalculus prepares students for other higher-level mathematics and science courses. The framework delineates content and skills common to college precalculus courses that are foundational for careers in mathematics, physics, biology, health science, social science, and data science.
Prerequisites/Notes: Successful completion of Algebra 2 Advanced and teacher recommendation.

260 Dual Enrollment Calculus **1 Credit / 4 USM Credits**

Calculus A introduces the concept of limit and applies it to the definition of derivative and integral of a function of one variable. The rules of differentiation and properties of integral are emphasized, as well as applications of the derivative and integral. This course features a multi-representational

approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally. In addition, this course is offered as a dual enrollment course with MATH 152 Calculus A from the University of Southern Maine. All students intending to earn USM college credit through a Concurrent Enrollment course must register through the ExplorEC portal, the University of Maine System's early college database. Students who have previously used ExplorEX to register for a Concurrent Enrollment, on-campus, or online course at a University of Maine System school will log-in using their existing account information (usually their personal or high school email address). All other students must create a new account. Instructions on creating an account and registering for a course in ExplorEC are available on the google classroom.
Prerequisites/Notes: Successful completion of Precalculus.

265 Dual Enrollment Advanced Placement (AP) Calculus 1 Credit / 4 USM Credits
AP Calculus AB focuses on students' understanding of calculus concepts and provides experience with methods and applications. Through the use of big ideas of calculus (e.g., modeling change, approximation and limits, and analysis of functions), the course becomes a cohesive whole, rather than a collection of unrelated topics. This course requires students to use definitions and theorems to build arguments and justify conclusions. The courses feature a multi-representational approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally. Exploring connections among these representations builds understanding of how calculus applies limits to develop important ideas, definitions, formulas, and theorems. A sustained emphasis on clear communication of methods, reasoning, justifications, and conclusions is essential. Teachers and students will regularly use technology to reinforce relationships among functions, to confirm written work, to implement experimentation, and to assist in interpreting results. Students must register each semester through ExplorEC in order to be approved for the early college credits associated with this course.
Prerequisites/Notes: Successful completion of Pre-Calculus Advanced, or an A in Precalculus with teacher recommendation.

273 Dual Enrollment Statistics 1 Credit / 4 USM Credits
Statistics will give students the foundational concepts and goals of descriptive and inferential statistics. This course covers the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include data collection and sampling techniques, frequency distributions and graphs, data analysis, probability, discrete and normal distributions, confidence intervals, hypothesis testing with one and two samples. Students will work independently and in group settings during both class time and outside of the classroom. Class focus will be on real world applications and demonstrations of statistical knowledge. Students must register each semester through ExplorEC in order to be approved for the early college credits associated with this course.
Prerequisites/Notes: Successful completion of Algebra 2.

275 Dual Enrollment Advanced Placement (AP) Statistics 1 Credit / 4 USM Credits
This is a college-level course in Statistics equivalent to one semester of statistics at most universities. It is a rigorous course introducing students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include exploration of data and describing patterns,

sampling and experimentation of planning and conducting studies, anticipating patterns and exploring random phenomena using probability and simulations, statistical inferences, estimating population parameters and testing hypotheses. Students will work independently and in group settings during both class time and outside of the classroom. Class focus will be on real world applications and demonstrations of statistical knowledge. Students must register each semester through ExplorEC in order to be approved for the early college credits associated with this course.
Prerequisites/Notes: Successful completion of Algebra 2 Advanced or an A in Algebra 2 and teacher recommendation.

573 Advanced Placement (AP) Computer Science Principles **1 Credit**
AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. It is important to note that the AP Computer Science Principles course does not have a designated programming language. Teachers have the flexibility to choose a programming language(s) that is most appropriate for their students to use in the classroom.
Prerequisites/Notes: Successful completion of Algebra 1 OR concurrent enrollment Algebra 1 and teacher recommendation.

501 Advanced Placement (AP) Computer Science A **1 Credit**
AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language.
Prerequisites/Notes: Successful completion of Algebra 1 and Computer Science Principles OR Successful Completion of Algebra 1 and teacher recommendation.

Science

314 Earth Space Science **1 Credit**
Earth Space Science is an entry-level science course that focuses on the study of Earth's composition, space, and the impact of human activity. Topics covered will include: 1) geology and the forces that help form the solid earth as we know it; 2) the oceans and their importance to mankind; 3) the Earth's place in the universe; 4) the atmosphere with its ever-changing cycles; and 5) how the activities of civilization threaten the natural environments in which we live. Many of the lab experiences in this course will include observations and interpretations of the natural phenomena around us.

316 Earth Space Science Advanced **1 Credit**

Students in the advanced sections of Earth Space Science should have a sincere commitment to undertake an accelerated program of study. They must possess strong reading comprehension skills, be an independent and self-directed learner and have been successful in grade level math classes. Be prepared to think critically and apply concepts learned in class to new situations.

Prerequisites/Notes: Teacher recommendation.

330 Biology **1 Credit**

Important biological fundamentals will be covered that include the nature of science, ecology, biochemistry, cell structure and function, genetics, species adaptation and classification. Classes are composed of lectures, hands-on activities, laboratory experiences and research projects.

Prerequisites/Notes: Successful completion of Earth Space Science.

335 Biology Advanced **1 Credit**

This course is designed to cover the important biological principles in depth and at an advanced pace. Students enrolling in this course must have shown exceptional ability in Earth Science, have a recommendation from their Earth Science teacher and have a sincere commitment to undertake an accelerated program of study. Advanced math skills are required, as this is an analytical class.

Prerequisites/Notes: Successful completion of Earth Space Science Advanced or successful completion of Earth Space Science and teacher recommendation.

341 General Chemistry **0.5 Credit**

This lab-based course introduces the student to chemistry in everyday life. Topics include scientific reasoning, matter and its interactions, atomic history and structure, the periodic table, nuclear chemistry, gas laws and acid-base chemistry.

Prerequisites/Notes: Successful completion of Earth Space Science and Biology. This course should be taken consecutively with General Physics.

351 General Physics **0.5 Credit**

This lab-based course introduces the student to physics in everyday life. Topics include how energy and matter interact, mechanics, Newton's Laws, momentum, work and power, forces in fluids, thermodynamics, waves, sound and light.

Prerequisites/Notes: Successful completion of Earth Space Science and Biology. This course should be taken consecutively with General Chemistry.

345 Chemistry 1 **1 Credit**

Chemistry is offered to students in grades 11 and 12 who have successfully completed Biology. In this course, students' skills in scientific reasoning and problem-solving are developed simultaneously. The course emphasizes atomic and molecular theory and uses laboratory experiences to enhance learning.

A fundamental knowledge of chemistry is essential for further study in science, and it has direct application to people's lives.
Prerequisites/Notes: Successful completion of Biology, Algebra 1, and Geometry. Concurrent enrollment in Algebra 2 is strongly recommended.

340 Chemistry 1 Advanced **1 Credit**
This rigorous course is designed for juniors who will be concurrently enrolled in Pre-Calculus. Topics covered will include atomic theory, periodicity, nuclear chemistry, chemical compounds, chemical reactions, the mole concept, stoichiometry, gas laws, kinetic theory and chemical solutions.
Prerequisites/Notes: Successful completion of Advanced Biology and concurrently enrolled in Precalculus (or approval of the Chemistry Advanced teacher in conjunction with the current Biology teacher).

300 Integrated Science **1 Credit**
This class is open to freshmen, sophomores, and juniors through teacher recommendation and who need a science credit. It is a course that focuses on basic science skills through project based learning.
Prerequisites/Notes: Teacher recommendation.

Electives

391 CSI Forensics **0.5 Credit**
Have you ever watched a crime investigation show or been interested in 'who did it' and 'how it was done'? This semester course will explore the application of science (biology, chemistry, earth science and physics) to the criminal justice system. This includes report writing and hands-on laboratory skills in topics such as fingerprinting, fiber analysis, ballistics, trace evidence analysis, toxicology, blood spatters and blood samples. Students will learn the proper collection, preservation and laboratory analysis of various crime scene samples. Analysis of evidence, evaluation (claim) of evidence and interpretation (reasoning) of evidence are the goals of forensic science.
Prerequisites/Notes: Concurrent enrollment in or successful completion of Biology.

392 CSI Forensics 2 **0.5 Credit**
This one semester course will explore more real world applications of science (biology, chemistry, earth science and physics) to the criminal justice system. This includes hands-on laboratory skills in topics such as ballistics, arson, toxicology, blood spatters and blood samples. Students will continue their studies from CSI Forensics 1 with more laboratory analysis of various crime scene samples and analysis of evidence.
Prerequisites/Notes: Successful completion of CSI Forensics 1.

347 Chemistry II Advanced **1 Credit**
This college level course is open to juniors and seniors who meet the prerequisites. The topics discussed begin with definitions of physical and chemical properties and the rules of dimensional analysis.Chemical reactions and reaction stoichiometry are studied in the context of aqueous solutions. Types of aqueous reactions are investigated (i.e. acid/base, oxidation/reduction) as well as quantitative aspects of the reactions (i.e. molar solutions, dilutions, titrations, limiting reagents,

reaction yields). Topics in gaseous-state chemistry and introduction to basic thermodynamics, Kinetic theory, Gas Laws, Equilibrium and LeChatelier's Principle. Strong Algebra and trigonometry skills are required to be successful. ***Prerequisites/Notes: Successful completion of Chemistry 1 Advanced or teacher recommendation.***

332 Marine Science **.5 Credit**

The ocean is a unique place. Less than 5% of it has been explored and it is estimated that one out of every six jobs in the United States is marine related. Marine science builds on the physical science and life science concepts learned in previous science courses and applies that knowledge to the exploration of the living and non-living environments of the ocean. This course will include a study of the physical, chemical, geological aspects of oceanography, marine biology, the coastal environment and the interrelationships among the disciplines.

Prerequisites/Notes: Concurrent enrollment in or successful completion of Biology and Chemistry.

365 Dual Enrollment Human Anatomy & Physiology I **1 credit / 4.5 USM credits**

This course introduces basic principles of physiology and anatomy through chemistry, cellular structure and function, genetics and embryology. This course discusses several physiologic systems including the muscular, skeletal, nervous, endocrine and integumentary systems. Student candidates must possess the ability to comprehend college-level text, take notes, have dedicated study habits and work independently. Content will be delivered through lecture, lab experiences and research projects. Students who successfully complete ***Human Anatomy & Physiology I*** will earn 4.5 college credits, the equivalent of USM's BIO 111 and BIO112. Students must register each semester through ExplorEC in order to be approved for the early college credits associated with this course.

Prerequisites/Notes: Successful completion of Advanced Biology or Biology and teacher recommendation.

366 Dual Enrollment Human Anatomy & Physiology II **1 credit / 4.5 USM credits**

This course is a continuation of *Human Anatomy & Physiology I*. The emphasis of the lecture portion of the course will be on the physiology of the organs and systems while the laboratory will emphasize the anatomy and organization of the various organs and systems - specifically, the circulatory, lymphatic, digestive, respiratory, urinary, and reproductive systems. Student candidates must possess the ability to comprehend college-level text, take notes, have dedicated study habits and work independently. Content will be delivered through lecture, lab experiences and research projects. Successful completion of ***Human Anatomy & Physiology II*** will earn an additional 4.5 college credits, the equivalent of USM's BIO 113 & 114. Students must register each semester through ExplorEC in order to be approved for the early college credits associated with this course.

Prerequisites/Notes: Successful completion of Dual Enrollment Human Anatomy & Physiology I.

371 Physics **1 Credit**

This course is designed to give the student an understanding of physical phenomena from a mathematical viewpoint. The analytical skills taught in this course are essential for students planning

to enter engineering, science or math programs in college or the military. Major areas of study include motion, mechanics, electricity and magnetism, heat and work, light and sound, atomic theory and the nature of forces. Students are provided with opportunities to develop their ability to interpret and analyze data and are urged to solve problems by reasoning rather than by rote memorization.
Prerequisites/Notes: Successful completion of Chemistry and Algebra 2.

375 Dual Enrollment Physics Advanced **1 Credit / 4 SMCC Credits**
Physics Advanced is a demanding college preparatory course intended to give the student an understanding of the physical phenomena from a mathematical viewpoint. Major areas of study will include motion, mechanics, electricity and magnetism, heat and work, light and sound and the nature of forces. Strong Algebra and Trigonometry skills are required to be successful in this course. Successful completion of ***Physics Advanced*** will earn an additional 4 college credits, the equivalent of SMCC's College Physics I (Physics-150). Students must register each semester through ExplorEC in order to be approved for the early college credits associated with this course.
Prerequisites/Notes: Successful completion of Algebra 2 Advanced or Algebra 2 and teacher recommendation. Recommended for seniors.

384 Dual Enrollment Biology II w/ AP option **1 Credit/4.5 USM Credits**
This college-level course is open to seniors and will offer an in-depth study of important biological principles as well as Biotechnology. This is a lab-intensive course, with at least 25% of class time spent in the laboratory. Much of the course content must be covered and studied independently by the student; therefore, candidates must demonstrate strong initiative and the ability to read and comprehend college-level text. Students enrolling in this course must complete a summer assignment prior to the start of the course. Successful completion of the course will earn students 4.5 USM credits equivalent to BIO105/BIO106. Students must register each semester through ExplorEC in order to be approved for the early college credits associated with this course.
Prerequisites/Notes: Successful completion of Biology and Chemistry and teacher recommendation.

331 Advanced Placement (AP) Environmental Science **1 Credit**
AP Environmental Science is a year-long, lab-based college-level course designed to provide students with the scientific principles and methodologies required to understand interrelationships of humans and the natural world. Students will be required to identify and analyze environmental problems, both natural and human-made, in order to evaluate the relative risks associated with these problems, as well as examine alternative solutions for resolving or preventing them. Upon completion of this class, students have the option of taking the AP Environmental Science exam in May to earn college credit. By September 13th, each student must submit a $40 deposit for the AP exam registration. (If there are financial concerns, please contact the building principal.)
Prerequisites/Notes: Successful completion of Earth Science, Advanced Biology, and Advanced Algebra.

Social Studies

It is the goal of the department that students end their three required years of Social Studies with a solid understanding of the foundations of civilization and geography, the historic and economic roles of the United States, the philosophical worldviews that make up contemporary international relations, thereby concluding their studies ready to become global citizens. Senior electives offer additional opportunities for students to develop these understandings in particular areas of focus.

405 World History 1 **1 Credit**

Students in this class will apply the skills of a historian while examining the development of civilizations from prehistoric times to the Enlightenment. Aligned with the Maine Learning Results, World History 1 class has a particular focus on geography skills, with basic economic concepts and the roles of government taught within the larger historical context. While emphasis is on the western hemisphere, study will be globally inclusive to help students understand the historical factors that led to the colonization of the Americas and in preparation for the continuing examination of World History as juniors.

Honors Challenge Option: While the World History 1 curriculum is designed to provide a rich and rigorous academic experience for all students, some 9th graders may wish to expand their historical knowledge and skills even further. For those students, we offer an "Honors Challenge" program that provides opportunities to enrich and deepen the student's understanding of history and to gain further practice at specific skills by completing a series of assignments, projects and assessments. Honors Challenge is particularly appropriate for students who plan to take AP US History as sophomores. Successful completion of the program will lead to an "Honors" designation on the student's academic transcript.

425S American Studies Social Studies **1 Credit**

In this Social Studies course students will have the opportunity to engage in learning US history and continue working on the skills and knowledge necessary for citizenship. This course explores units including the Constitution, Industrialization and the Progressive Era, America as an Emerging World Power and units focusing on the key elements of the 20th century, such as the New Deal, World War II, the Cold War, the Civil Rights Movements and the Roots of Terrorism. The course should help students understand the world we live in and the ways in which they can play a role in it.

Prerequisites/Notes: Successful completion of World History 1.

425SA American Studies Social Studies Advanced **1 Credit**

This is a college-level prep course that explores units including the Constitution, Industrialization and the Progressive Era, America as an Emerging World Power and units focusing on the key elements of the 20th century, such as the New Deal, World War II, the Cold War, the Civil Rights Movements and the Roots of Terrorism. Students will read progressively more complex materials including primary sources. Students will consider multiple perspectives, evaluate historical claims, and develop the use of evidence to support a historical thesis. Additionally, students will write for academic purposes, process their own ideas, develop the knowledge base to become active citizens and prepare for success in their future educational pursuits.

Prerequisites/Notes: Successful completion of World History 1 and teacher recommendation.

430 Advanced Placement (AP) United States History **1 Credit**

Open to sophomores and seniors, this class is designed to provide students with the factual knowledge and analytical skills to deal critically with the issues and materials of American history. Therefore this class requires intensive reading and writing as well as frequent seminar-style discussions. By September 13th, each student must submit a $40 deposit for the AP exam registration. If there are financial concerns, please contact the building principal.

Prerequisites/Notes: Successful completion of World History I or American Studies Advanced or American Studies and teacher recommendation.

Junior & Senior Program

In 11th and 12th grades, students may take EITHER a year-long, grade-level-specific course OR two semester-long courses to earn the required credits for Social Studies. Students may not take both of their required courses in the same semester. Before taking any of the following courses, students must successfully complete a year of World History 1 and American Studies.

Year-long Junior & Senior Courses

437 Advanced Placement (AP) Modern World History **1 Credit**

In AP World History students will investigate significant events, individuals, developments and processes from 1200 to the present. Using the same skills, practices and methods employed by historians, students will cover history from Asia, Africa, Europe, the Middle East and the Americas through primary and secondary sources while building their own arguments and connections. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organizations and technology and innovation. A summer reading of material is necessary for the course. By September 13th, each student must submit a $40 deposit for the AP exam registration. If there are financial concerns, please contact the building principal.

Prerequisites/Notes: Successful completion of American Studies Advanced or American Studies, AP US History, and teacher recommendation.

Semester Courses for Juniors and Seniors

460 Economics Standard **0.5 Credits**

In this class, students will further investigate core elements of economics, including economic systems, supply and demand, market structures, the labor market, types of business organizations, and the role the government plays in the economy. Students will also learn the basics of personal

finance, such as budgeting, saving, investing, credit scores, student loans and the benefits and dangers of credit card use.

460A Economics Advanced **0.5 Credits**

In this class, students will deeply investigate core elements of economics, including economic systems, supply and demand, market structures, the labor market, types of business organizations, and the role the government plays in the economy. Students will also learn the basics of personal finance, such as budgeting, saving, investing, credit scores, student loans and the benefits and dangers of credit card use. Students will need to demonstrate a high level of critical thinking, analysis, and complex application of concepts. Students will also explore diverse economic theories and perspectives, engage with complex readings and critically analyze primary and secondary documents.

402 War and Diplomacy in the 20th Century **0.5 Credits**

This course will focus on global developments across political, economic, military, and diplomatic spectrums from 1900-2000 and the changing roles of nation states throughout the world's most tumultuous century, so far…

471 The Holocaust and Human Rights **0.5 Credits**

This course looks at the history of the Holocaust, the destruction of European Jewry during World War II, from many different perspectives. Students will analyze their own values and beliefs as they learn about and come to understand the decisions and actions of victims, victimizers, rescuers/resisters, and bystanders. Finally, students will investigate other genocides in order to complete a comparison with the Holocaust and determine common causes of genocide. Classroom discussions hinge upon a student commitment to a high level of reading and a willingness to articulate and support personal opinions.

488 Revolutions Around the World **0.5 Credits**

From Enlightenment ideals to contemporary protests, students will consider "What is worth fighting for?" Course content may include the American Revolution, French Revolution, Haitian Revolution, Latin American Revolutions, Revolutions of 1848, Russian Revolution, Chinese Communist Revolution, Cuban Revolution, Iranian Revolution, and the Arab Spring Revolts. Students will write for academic purposes, process their own ideas, develop the knowledge base to become active citizens and prepare for success in their future educational pursuits.

479 Global Issues and International Relations **0.5 Credits**

Students will explore and evaluate contemporary issues across the world as well as the way in which specific nations and cultures view and value global norms and taboos. Students will also explore current and historic international negotiation and modes of diplomacy.

467 Cold War Case Studies **0.5 Credits**

This course provides an overview of the geopolitical, ideological, and economic rivalry between the Soviet Union and the United States from World War II to the dissolution of the Soviet Union in 1991. Using a case studies model, students will examine key events that contributed to the rise in global

tensions in the post-WWII world, including: the Berlin Airlift, Nuclear Arms Race, Space Race, the Korean War, the Cuban Missile Crisis, and the Vietnam War. Additionally, students will examine various diplomatic attempts to de-escalate tensions during the Cold War and the factors that eventually led to the collapse of the Soviet Union.

489 Model United Nations and Global Issues Advanced **0.5 Credits**

During the semester students will choose two countries that are currently members of the United Nations. Over the course of the semester students will be asked to research those countries' histories, cultures, current issues, political systems, and economic systems. Students will represent their countries in simulations related to current global issues. These simulations are designed to help students develop higher thinking skills while learning how to express the viewpoints of their countries, engage in negotiations and make compromises with other delegates. Ultimately, the class will provide students with insight into world conflicts, issues, and international politics. Students are highly encouraged to participate in the Model United Nations conference held at USM each May. Typically, this conference is held the third week of May from Wednesday to Friday and involves time both during and after the school day.

488A Revolutions Around the World Advanced **0.5 Credits**

From Enlightenment ideals to contemporary protests, students will consider "What is worth fighting for?" Course content may include the American Revolution, French Revolution, Haitian Revolution, Latin American Revolutions, Revolutions of 1848, Russian Revolution, Chinese Communist Revolution, Cuban Revolution, Iranian Revolution, and the Arab Spring Revolts. Students will engage with progressively more complex materials including primary sources. Students will consider multiple perspectives, evaluate historical claims, and develop the use of evidence to support a historical thesis. Additionally, students will write for academic purposes, process their own ideas, develop the knowledge base to become active citizens and prepare for success in their future educational pursuits.

468 Struggle For Meaning: Advanced **0.5 Credits**

This course is an exploration of key intellectual and social movements that have shaped contemporary thought, politics, and culture from the Enlightenment to the present. Students will examine the origins of movements including feminism, liberalism, nationalism, socialism, and environmentalism and their ongoing influence on today's world. Students will explore diverse perspectives, engage with complex readings and critically analyze primary and secondary documents.

469 Imperialism and Decolonization Advanced **0.5 Credits**

In this course students will explore territorial expansion and colonization by European powers, the US and Japan during the late 19th and early 20th centuries. Students will explore diverse perspectives, engage with complex readings and critically analyze primary and secondary documents. The course will highlight the political, economic, and social motivations behind New Imperialism as well as major events including the Scramble for Africa and the Opium Wars. Additionally, students will examine the impacts of New Imperialism including the rise of independence movements and the ongoing influence of imperialism on today's world.

Electives

Students may choose to take one of the following elective courses in addition to the courses above that meet the third year requirements.

450 Philosophy for Life **0.5 Credit**

This course invites students to consider some of the fundamental questions of human life, including: What are the keys to a happy and fulfilling life? How do we tell right from wrong? What kind of society will best help people thrive? While students will be introduced to influential ideas drawn from a wide variety of sources ranging from ancient philosophers to modern psychologists and political scientists, the main goal of the course is for students to begin developing and articulating their own perspectives. Class sessions will be conducted primarily in a discussion-based format.
Prerequisites/Notes: Recommended for juniors and seniors.

484 Advanced Placement (AP) Psychology **1 Credit**

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. By September 13th, each student must submit a $40 deposit for the AP exam registration. If there are financial concerns, please contact the building principal.

Technology

500 Introduction to Technology **0.5 Credit**

Introduction to Technology exposes students to a variety of technological processes and fields in the areas of Materials Processing, Technological Design and Planning, Technical Drawing, Computer Aided Drawing, Graphic Communications, Computer Applications, Video Production and Digital Media. Students will also be involved with career preparation skills such as filling out a job application as well as preparing for and taking part in a mock job interview. The one semester course is broken into three equal sections taught by three instructors.

505 Back to Basics **0.5 Credit**

This is a hands-on lab class. Areas of instruction will be project based and include the safe use of hand and power tools traditionally used in careers involving woodworking, metalworking, residential construction, and tools often used for common home repairs. Students enrolled in the class will be required to use a variety of materials to build small projects which are appropriate for the time constraints of the semester class. (Due to the cost of materials, students will also be required to purchase materials for individual projects that go above and beyond the scope of the class projects.)
Prerequisites/Notes: Recommended for sophomores, juniors, and seniors.

506 Technical Drawing/CAD **0.5 Credit**

Students will be involved in the basics of technical drawing and Computer Aided Drawing (CAD). Students will be exposed to the techniques of sketching that will lead to both orthographic and isometric drawings. Emphasis will be placed on line technique, accuracy of representation and measurements. Students will utilize a CAD system through which they will gain more advanced experience in modern Technical Communications.

517 Architectural Drawing/Residential Design **0.5 Credit**

Students will be introduced to residential home design and basic construction techniques. They will complete a set of sample plans of a basic structure. They will then complete a set of house plans for a home which they design. This course is designed to give the student a basic knowledge of architectural structures, history and rendering techniques. Students will build a model of their design from their plans.

531 Pre-Engineering **0.5 Credit**

Pre-Engineering is designed for the student who has interest in some form of engineering or technical field. The class will incorporate science, math, and physics concepts used to solve technical problems. In addition, students will be exposed to introductory drawing techniques necessary to develop sketches, orthographic and isometric drawings. The class will concentrate on a systematic approach to design and problem solving used by engineers. Following instruction on the safe use of tools and equipment, students will work in the materials lab to complete activities which will investigate: mechanical linkages, simple machines, strength of materials and transportation.
Prerequisites/Notes: Recommended for sophomores, juniors, and seniors.

540 Graphic Arts 1 **0.5 Credit**

This course will emphasize principles of design and methods of printing such as screen, lithography and block. Students will be able to demonstrate and explain their design work as they study and experiment with a variety of printing processes. Students will also be introduced to traditional photography through the use of pinhole cameras. During the course the students will be exposed to a number of technological methods of image generation and reproduction such as scanning, desktop publishing and digital cameras. Application of these skills will be required. (A Lab Fee will be assessed for projects beyond regular classroom projects.)

545 Graphic Arts/Digital Media 2 **0.5 Credit**

Graphic Arts/Digital Media 2 is a course designed to further develop students' skills in graphic design. Building upon the concepts learned in Graphic Arts 1 and Digital Media 1, this course will focus on advanced techniques and applications in graphic design. Students will explore topics such as typography, layout design, branding, and digital illustration. Through hands-on projects and assignments, students will enhance their creativity, problem-solving abilities, and technical skills in graphic design.
Prerequisites/Notes: Successful completion of either Graphic Arts 1 or Digital Media 1.

548 Digital Photography/Storytelling **0.5 Credit**

Digital Photography/Storytelling is a course designed to introduce students to the art of photography and storytelling through digital media. Students will learn the technical aspects of digital photography, including camera settings, composition, and lighting. They will also explore the creative aspects of storytelling through visual imagery. Through hands-on projects and assignments, students will develop their photography skills and learn how to effectively communicate stories through digital media.

550 Digital Media **0.5 Credit**

The digital media class will focus on three major areas:

1. Learning about and applying the principles and elements of Great Design;
2. Using a digital camera to take high quality images; and
3. Using graphic software (Adobe Photoshop) to create a series of layouts and designs.

This is a HANDS-ON CLASS. After we learn about the principles and elements of GREAT DESIGN, you will spend class time learning how to properly use digital cameras to take excellent images! After you have learned how to use the digital cameras, you will learn how to use many of the tools that are available in Adobe Photoshop to create a series of visual products.

560 Video Production **0.5 Credit**

Students will learn about and utilize the television production process to plan and produce video projects. Students will learn how to operate and use portable camcorders and Apple iMOVIE video-editing software. We will practice camera movements, identify elements of good composition, and learn about the art of video-making. Throughout the course, students will work on individual and group video projects. Projects will include: "Line of Action Video," "Commercial Analysis Project," "Technology Report," "Public Service Announcement," "Self Interview," and a final project of your choice. We will also discuss media and how it affects our society, and will explore "Media Literacy - the ability to understand and evaluate all the symbol systems of a society and to access, analyze, evaluate and produce communications in a diversity of forms." Strong emphasis will be placed on developing critical viewing skills, both technical and conceptual.

570 Web Page Design **0.5 Credit**

This class is designed for students who want to learn how to employ principles and elements of good design to build effective sites but who do not want to learn about the complicated code that is often used to build sites. Along the way, we will also learn about how the internet has evolved and how it works. How do web pages get from a server to your computer? How is the internet evolving - what new technologies are emerging and how will this change our lives?

You will learn how to:

- Purchase your own domain name
- Purchase your own web space (web hosting service)
- Set up your web hosting service
- Move files from your computer to the web server
- Use Adobe Photoshop to create beautiful graphics for your web site
- Use Adobe MUSE web page building software to create your web site

(Purchasing a domain name and hosting service is not a requirement for the course; I am simply going to show you how!)
Throughout the class, you will build several sites that will incorporate a variety of text and media. The emphasis will always be on effective web page design. The look of the site and the functionality of the site are equally important.

576 Entrepreneurship **0.5 Credit**
In the Entrepreneurship class, students will brainstorm ideas for developing their own small business and consider the many aspects of bringing a product to market. Students will work to develop their own branding, production and packaging process. We will be hosting local business owners, visiting businesses in the community as well as participating in the Titan challenge!

Advanced Technology Courses

524 Advanced Video Production **0.5 Credit**
This course will allow students to further explore advanced TV Production. The student will work on a series of independent video productions. Students must be highly motivated and self-directed.
Prerequisites/Notes: Successful completion of TV Production and teacher recommendation.

527 Advanced Web Page Design **0.5 Credit**
This course will allow students to further explore Web Page Design. The student will work on a series of independent web page projects. Students must be highly motivated and self-directed.
Prerequisites/Notes: Successful completion of Web Page Design and teacher recommendation.

501 Advanced Placement (AP) Computer Science A **1 Credit**
This demanding course is a fast-paced introduction to computer science and programming in the Java language, and is open to interested students with proven academic performance. Using object-oriented programming, students design and implement increasingly complex Java classes, constructors, and methods to solve given problems. In the process, they develop and analyze algorithms, use data structures, and learn about recursion, inheritance, and polymorphism. Upon course completion, students will be prepared for the AP Computer Science exam in May. Each student must submit a $40 deposit for the AP exam registration. If there are financial concerns, please contact the building principal.
Prerequisites/Notes: Successful completion of Algebra 1 and Computer Science Principles OR Successful Completion of Algebra 1 and teacher recommendation.

573 Advanced Placement (AP) Computer Science Principles **1 Credit**
AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. It is important to note that the AP

Computer Science Principles course does not have a designated programming language. Teachers have the flexibility to choose a programming language(s) that is most appropriate for their students to use in the classroom.
Prerequisites/Notes: Successful completion of Algebra 1 <u>OR</u> concurrent enrollment Algebra 1 and teacher recommendation.

World Language

In choosing a world language, it is best to have three or four years of a single language. Some students prefer to take two years of two languages, and this also is acceptable. Two years of one language is the minimum requirement for college preparation. There are colleges that do not require a world language for admission to some of their programs, but the logical learning sequences and the memory training that a student can obtain from taking a world language is difficult to duplicate in other high school courses.

610 French I **1 Credit**

This course focuses on reading, writing, listening and speaking in French, as well as learning about diverse francophone cultures. In this course students will learn through interactive and collaborative work, in large and small groups, as well as individually. Content ranges from the very basics like the alphabet, numbers, and days of the week to talking about daily activities, hobbies, and school subjects. All of the content studied in this course will be connected to real world applications and encourage students to use French beyond the classroom for lifelong learning and enrichment.

620 French II **1 Credit**

This course builds upon the foundation of basic French grammar structures and vocabulary established in French I. Students will acquire new structures and vocabulary through reading, journal writing, daily partner conversation, and storytelling. Conversational practice will focus on students' personal experiences and interests. In addition to contextualized instruction, students will explore a variety of cultural topics and thematic units. Throughout the course, students will develop their reading comprehension and critical thinking skills.
Prerequisites/Notes: Successful completion of French I.

625 French III **1 Credit**

This course invites students to engage with the French language and francophone cultures through a variety of high-interest short stories and easy to read novels. Students will learn about the education system in France and compare it to their own, explore the history and culture of Normandy and other regions of France, learn about French and francophone music, and discover the rich culture of Belgium, among other topics. Students will acquire more complex grammar structures and various verb tenses through reading, writing, and listening to French. Daily conversational practice will focus on students' personal experiences and real life situations. Throughout the course, students will develop their reading comprehension and critical thinking skills, while making connections with other disciplines, such as history, geography, history of art, and music.
Prerequisites/Notes: Successful completion of French II.

630 Dual Enrollment French IV **1 Credit / 8 USM Credits**

In this course students will continue developing their communicative, interpretive and analytical skills. Students will explore thematic units that are relevant to their future work and life experiences, such as travel, shopping, dining, and giving directions. Students will read short stories and novels set in French-speaking countries, and acquire complex grammatical structures and vocabulary. Students will continue exploring the cultures of the francophone world and making intercultural reflections. Daily conversational practice will focus on students' personal experiences and real life situations. Throughout the course, students will develop their reading comprehension and critical thinking skills, while making connections with other disciplines, such as history, geography, history of art, and music. In this dual enrollment course, students have the opportunity to earn 8 college credits upon successful completion. Students must register each semester through ExplorEC in order to be approved for the early college credits associated with this course.

Prerequisites/Notes: Successful completion of French III.

640 Spanish I **1 Credit**

Objectives include participation and performance in each of the five skill areas: listening, speaking, reading, writing and culture. Classwork and homework include dialogues, verb charts and translations, oral summaries and presentations. Evaluation is based upon your participation, effort and technical skill. Classwork and homework are a necessary part of the course.

650 Spanish II **1 Credit**

This course furthers the development of communicative skills. Additional complexity in verb and grammar content is explored through the use of class activities, homework and projects. Students discuss and write about topics that are meaningful to their lives in a more complex way. Spoken skills are emphasized prior to taking Level 3. Learners start to communicate in the past tense in addition to the present tense. They read a variety of short stories as well as a simple chapter book in Spanish.

Prerequisites/Notes: Successful completion of Spanish I.

655 Spanish III **1 Credit**

This course reviews all previous work in verbs, grammar and continues building vocabulary. The culture of Spanish-speaking countries is emphasized. Students continue to express themselves, orally and through writing, in a more rigorous way. Learners expand on their ability to express themselves using the continuous past tense. They can recount their pasts and tell stories in meaningful ways. Students read a variety of short stories as well as a simple chapter book in Spanish.

Prerequisites/Notes: Successful completion of Spanish II.

660 Dual Enrollment Spanish IV **1 Credit / 8 USM Credit**

Spanish 4 will focus on art, literature, culture and advanced grammar. Also stressed will be conversation, oral presentations and listening comprehension. In this dual enrollment course, students have the opportunity to earn college credits upon successful completion. Students must register each semester through ExplorEC in order to be approved for the early college credits associated with this course.

Prerequisites/Notes: Successful completion of Spanish III.

665 Latin I **1 Credit**

This introductory course aims to provide students with an introduction to the Latin language along with the history and culture of the Ancient Romans. By reading Latin stories about a family living in Pompeii, students will explore topics of daily life in the Ancient Roman Empire including families, towns, education, entertainment, local government, social structure and mythology. Students will learn latin vocabulary along with its English derivatives, simple sentence structures and basic grammar. Although nearly 3000 years old, Latin provides the basis for two-thirds of our English vocabulary and is frequently found in medical, legal and musical terminology. All students are welcome.

670 Latin II **1 Credit**

This course bulbs upon the foundation of Latin grammar and vocabulary established in Latin 1. Students will explore life in the Roman provinces of Britannia and Alexandria and explore topics such as imperialism, ancient medicine, science, religion and glassmaking. Students will read more challenging and lengthy Latin reading passages that introduce new grammar while reviewing the basic forms of Latin 1. Throughout the course, students will develop their reading comprehension and critical thinking skills.

Prerequisites/Notes: Successful completion of Latin I.

675 Latin III **1 Credit**

In Latin 3 students continue developing their reading comprehension skills and learn intermediate grammar concepts. They will learn about life in Ancient Rome, the heart of the empire, the architecture, religion, philosophy and military of the people there. Students will continue to read Cambridge Latin Course stories, but there will also be a shift towards authentic Latin texts of Pliny, Martial, Ovid and various epigraphic authors as students become more proficient readers.

Prerequisites/Notes: Successful completion of Latin II.

680 AP Latin **1 Credit**

AP Latin is equivalent to an upper-intermediate level college course in Latin focusing on the in-depth study of selections from two of the greatest works in Latin literature: Vergil's *Aeneid* and Caesar's *Gallic War*. Students cultivate their understanding of classics through preparing and translating readings and considering themes in the context of ancient literature as they explore concepts like literary techniques, Roman values, war and empire, leadership, views of non-Romans, history and memory, and human beings and the gods.

Prerequisites/Notes: Successful completion of Latin III.

General Elective Courses

ELO 2 Dual Enrollment Exploring Teaching as a Profession **1.0 Credit/3 USM Credits**

An introduction to the study of education and teaching, this course provides opportunities for

students to examine and evaluate their interest in and aptitude for a career in teaching. The structure of the course combines faculty-directed seminars with coordinated extended learning experiences in school settings. In addition to examining and reflecting upon their extended learning experiences in their seminar sessions, students will examine the following topics: current initiatives and issues in education and teaching, the diverse needs of students, the multiple roles of teachers, the professional and ethical expectations of teachers, school curriculum, culture and organization, and teacher certification programs and professional development options. Part of the course will be extended learning experiences in classrooms. This is an Early College Course for which students earn both Gorham High School elective credit and 3.0 USM college credits. Students must register through ExplorEC in order to be approved for the early college credits associated with this course. Attendance at participating elementary school functions (Open House, conferences, some faculty meetings, etc.) is mandatory.

Prerequisites/Notes: Recommended for juniors and seniors.

574 Adulting 101 **0.5 Credit**

Formerly known as "Senior Seminar", Adulting 101 is an essential high school course designed to equip students with crucial financial knowledge and skills necessary for adulthood. Throughout the course, students will engage in dynamic discussions and real world case studies that foster critical thinking and responsible decision making regarding the following topics: job search strategies and comparisons, budgeting your money, understanding the importance of credit scores and how to maintain good credit, explore different types of insurance and learn to evaluate coverage options, learn how to file your taxes and understand deductions, navigate the car buying process, learn what a mortgage is and the steps in buying a home plus many more. Students will also benefit from guest speakers, field trips and hands-on projects that apply classroom learning to real-life scenarios. This course prepares students not only for today's financial challenges but for a lifetime of responsible financial management. By the end of this course, students will feel empowered to make informed financial decisions that come with adulthood.

Teacher Assistant **.25 Credits / Semester**

Students have the opportunity to apply to be a teacher's assistant during a time when the student has a study hall in their schedule. Students will assist the teacher in planning and preparation for their classes. Some examples could be assisting the teacher in organizing the learning environment, preparing materials and maintaining resources for classes. Students can pick up the application to be a TA in the student services office. A school counselor, the teacher and the student will be helping and a parent should sign the application and return it to the student services office.

520 AP Seminar **1 Credit**

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based

written essays, and design and deliver oral and visual presentations, both individually and as part of a team. The team component is prominent and highly collaborative. Students will be responsible for extensive, individual research to contribute equally to a group project to be assessed by the College Board. The skills necessary for successful group work include, but are not limited to, consistent verbal and written communication, the ability to compromise and collaborate, and the ability to synthesize complex perspectives regarding an established issue to construct a solution with group members. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision to craft and communicate evidence-based arguments. Students will be expected to complete all AP exam requirements during the course, as well as take the end-of-course AP exam.

Prerequisite: Grade 10+ & Average grade of 90+ in your GHS English courses

521 AP Research **1 Credit**

(will be available in SY 2026-2027)

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a yearlong mentored research-based investigation to address a research question. In the AP Research course, students further their skills acquired in AP Seminar by understanding research methods; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. The course culminates in an academic thesis paper of approximately 5,000 words and a presentation, performance, or exhibition with an oral defense. Students will be expected to complete all AP Exam requirements during the course.

Prerequisite: Grade 11+ & 3 or above in AP Seminar

RAM Lab **.25 Credits /Semester**

Students will receive structured support in the RAM Lab aligned with their area of need regarding literacy, math, or executive skills. The priority will be to address the specific needs of each student. There will also be opportunities for students to receive time and support around homework, classroom assignments, study skills, and more as needed. Students will earn .25 elective credit per semester of RAM Lab and will receive a grade of Pass/Fail based on their performance. Students will be reviewed every quarter to determine whether continued support is needed.

English Language Learners (ELL)

The ELL Program of Studies is designed for those whose first language is not English. In order to have access to mainstream requirements and academic language demands, these courses are available for those needing instructional support. Following the *WIDA Model* across the four language domains of Listening, Speaking, Reading and Writing, classes are divided into four proficiency levels. English Language Learner goals are planned by the collaboration of the student and the teachers to meet individual needs. As is required by law, Language Learners must have received a level 6 as assessed by *ACCESS for ELLs* before being able to exit the program.

The ELL Resource Room is available to any English Language Learner needing support or just a quiet place to work. In all courses, students will receive homework help when needed. Students are allowed to take tests in the ELL Resource Room with teacher help. Foreign Exchange students are also encouraged to participate.

1070 Entering ELL English **1 Credit**

(Proficiency level 1) This course is available for newcomers to the language of English, for those who have been in the U.S. for 12 months or less or those students needing proficiency level 1 support. Topics may include classroom routines, school life, social & cultural traditions, study skills and strategies, informational gathering, daily life, vocabulary development, listening, reading & writing strategies and communicative language.

No Prerequisite.

1071 ELL English Workshop 1 **1 Credit**

(Beginners: Proficiency level 2) Topics may include building academic language, general language needed for mainstream content area classes, strategies for developing reading and writing skills, autobiographical and biographical narratives, note taking, The Story of the U.S., banking and money, mathematical terms and topics related to the student's content area courses.

Prerequisites/Notes: Must have received the screening MODEL or passed the ACCESS for ELLs Tier A level and passed level 1.

1072 ELL English Workshop 2 **1 Credit**

(Developing: Proficiency level 3 & 4) Topics may include multicultural/ world literature, research and investigation, literary genres, multiple meanings in words, convention and mechanics, character development in literature, scanning for the main idea, the interviewing process, mathematical word problems and their meanings and topics related to scientific terms, research and investigation, world histories/civilizations/cultures, historical figures and times and the writing process.

Prerequisites/Notes: Must have received the screening MODEL, or ACCESS for ELLs and passed level 2.

1073 ELL English Workshop 3 **1 Credit**

(Expanding/Bridging: Proficiency Level 4 & 5) Topics may include points of view, critical commentary, debate, literal and figurative language, mathematical academic terms for test-taking, compare and contrasting, social issues, problem-solving, summarizing information from various sources, skimming material for meaning of words or sentences in context, discussing pros and cons, integrating information into a text and any topic that may relate to student mainstream classes.

Prerequisites/Notes: Must have received the screening MODEL, or ACCESS for ELLs and passed level 3.

1074 ELL Adv Writing Workshop **1 Credit**

(Proficiency Level 5 & 6/ACCESS Tier C) This course is designed for those ELL students who want to continue improving their writing skills. This class will focus on writing strategies that will prepare them for college academic writing assignments. Topics may include sentence structure, paragraph to essay, process essays, paraphrase and summary, cause and effect essays, comparison and contrast essays, persuasive essays, descriptive essays, reasoning essays and the writing process.
Prerequisites/Notes: Earns elective credit.

1075 ELL American History **1 Credit**
ELL American History focuses on building background knowledge of American history from the Pre-Columbian era through the Modern Age. Emphasis will be placed on major historical events and people, as well as U.S. Geography. Additionally, the course will incorporate a basic understanding of America's system of government and the information necessary to successfully apply for U.S. Citizenship.
Prerequisites/Notes: Permission of administrator and/or teacher.

1079 ELL Study **0.5 Credit**
In lieu of a regular study hall, students may receive homework tutoring, project help, test taking or any necessary language support.
Prerequisites/Notes: Earns elective credit per semester

Early College

ASPIRATIONS PROGRAM

The Aspirations Program provides eligible Maine high school students with an opportunity to receive academic credits toward a high school diploma, and an associate or baccalaureate-level degree, through enrollment and successful completion of college-level courses at approved Maine institutions. This is often referred to as dual or concurrent enrollment. Students have the opportunity to earn college credits upon successful completion of each course. Students must register each semester through ExplorEC or OnCourse in order to be approved for the early college credits associated with college courses offered at Gorham High School.

Beginning with the Class of 2027, each student will be able to access a lifetime total of 18 tuition-free college credits through the Aspirations Program. The annual limit for eligible students will remain at 12 tuition-free credits, and students will be limited to a lifetime total of 18 credits. The one exception to the 18-credit lifetime limit will be CTE students in designated early college career pathways, as many of those programs have co-requisite course requirements. Students in approved CTE pathways will be able to access a total of 24 tuition-free college credits.

Students who choose to take courses beyond the lifetime limit may apply for additional credits as self-pay students at the Early College tuition rates set each year by University of Maine System and Maine Community College System.

Additional early studies options are available through Husson University and St. Joseph's College. Students should discuss their options for early studies programs with their school counselor.

Students are responsible to pay for transportation, books and fees and any credits over the 12 free credits each year.

Alternative Pathways

INDEPENDENT STUDY

An Independent Study is an opportunity for students to design a unique course of study. Some of the reasons to consider this option are: the subject/topic in which you are interested is not offered at GHS; you want to do a research project of interest to you; you are interested in creating a product, or participating in an experience, as a special component or extension of a course or interest; or you want the opportunity to delve deeply into a subject to solve a problem or to answer a question. See your School Counselor to discuss this option.

Extended Learning Opportunities

Extended Learning Opportunities (ELOs) are customized learning experiences. They offer students safe, structured and engaged learning opportunities outside of a traditional course and/or the school day. ELOs are for students who are interested in exploring their career and personal interests in an immersive setting. ELOs can include experiences such as job shadows, internships, informational meetings, workplace learning experiences or interest-based projects, and they ultimately support and complement the learning taking place through their traditional classroom experiences.

From astronomy to photography, accounting to veterinary science, ELO credit is earned in a student's field of interest through completing an established learning plan that includes goals, summary of site plan/hands-on experience as well as tasks/deliverables. An interest-based project might look like: writing a book, building a deck, mentoring young students, painting a mural in a public area or building, planning for and cultivating a garden, building a rocket and adjusting it for maximum propulsion, and more.

Credit will be awarded based on how much time is spent in the ELO placement (60 hours for 0.5 credit and 120 hours for 1 credit). Students will have regular meetings with an ELO coach for support and will expand their skills in communication, resume building, and interviewing to further develop career and life readiness capabilities. A learning team composed of a student, ELO coach, and a mentor and/or teacher creates a learning plan that is informed by learning targets and activities aligned to Maine's Career and Life Ready Standards.

The Lynx Program: Alternative Education

The Lynx Alternative Education Program at GHS strives to guide students to graduation by providing multiple pathways to success. There are several cornerstones of our program: build confidence and engage students in their learning, create real world learning experiences, and provide meaningful skills for life. This program will provide students with support to successfully navigate through high school with smaller class size, personalized instruction, and project-based approach to learning. Students earn credit through the courses listed below, as well as participation in community service activities, field trips, and out-of-classroom learning experiences.

Integrated English 9-10 **1 Credit**
This course aims to foster and develop students' reading and writing skills connected to the themes of study covered in other classes of the alternative education program. Readings are based on student interest, and weekly writing places emphasis on narrative experiences. Students will often participate in small group work, class discussions, and hands-on projects. Students will also focus on processing real world information from texts and online sources as they begin to explore and prepare for future careers. ***Prerequisites/Notes: Administrative recommendation and approval.***

Integrated Physical Education 9-10 **.5 or 1 credit**
Over the course of the school year, students will have the option to choose between a half-year or whole-year of participation in physical activities. During the fall and spring, students will participate in daily walks, field trips to ropes courses and climbing walls, and hiking trips to nearby locations. In the winter, students will have the opportunity to complete workouts in the school weight room, go snowshoeing, and participate in other winter activities. ***Prerequisites/Notes: Administrative recommendation and approval.***

Integrated History 9-10 **1 Credit**
Whether it be exploring the foundations of the US government or worldwide events, Integrated History strives to build connections between today and the past. Students will work on research skills through project-based activities and participate in discussions that consider the many different perspectives surrounding historical events. This course builds connections with the other areas of study in the program. For example, as students learn about natural resources in Science, they investigate the historical development of Maine's timber, fishing, and energy industries. ***Prerequisites/Notes: Administrative recommendation and approval.***

***TBD* Humanities 11 (1065S World History and 1065E English 11)** **1 Credit**
This course includes many of the core academic standards of English 11 and Modern World History, with a greater focus on personal relevance of readings, narrative writing, and connections to historical events through a study of current events and issues from today's world.
Prerequisites/Notes: Administrative recommendation and approval.

Integrated Fine Arts 9-10

Integrated Science 9-10

Integrated Math 9-10

314A Alternative Earth Space Science **1 Credit**

This yearlong, entry-level science course is designed for students who need review, reinforcement, and increased support with their science curriculum and earth science topics. This alternative education course will provide interdisciplinary, hands-on, project-based, and experiential connections, while also providing a smaller class size. This content will cover the majority of standard Earth Space Science, including: 1) geology and the forces that help form the solid earth as we know it; 2) the oceans and their importance to mankind; 3) the Earth's place in the universe; 4) the atmosphere with its ever-changing cycles; and 5) how the activities of civilization threaten the natural environments in which we live. There is a focus on key concepts and learning objectives, with an increased emphasis on classwork.

Prerequisites/Notes: Recommendation of a teacher and administrative approval.

221 Alternative Algebra 1 **1 Credit**

Alternative Algebra 1 is designed for students who need review, reinforcement, and increased support with their math curriculum, topics, and skills. This course includes a review of basic skills, specifically, the order of operations, decimals, fractions, percents and proportions. This alternative education course will provide interdisciplinary, hands-on, project-based, and experiential connections, while also providing a smaller class size. The content will cover the majority of standard Algebra 1, including: simplifying expressions, solving equations and inequalities, creating and graphing linear functions, and statistics. There is a focus on key concepts and learning objectives, with an increased emphasis on classwork.

Prerequisites/Notes: Recommendation of a teacher and administrative approval.

207 Alternative Geometry **1 Credit**

Alternative Geometry is designed for students who need review, reinforcement, and increased support with their math curriculum, topics, and skills. This course includes a review of basic skills, specifically, the order of operations, decimals, fractions, percents and proportions. This alternative education course will provide interdisciplinary, hands-on, project-based, and experiential connections, while also providing a smaller class size. The content will cover the majority of standard Geometry, including spatial reasoning, angles and lines, triangles, polygons, congruence, similarity, geometric reasoning, and triangle trigonometry. There is a focus on key concepts and learning objectives, with an increased emphasis on classwork.

Prerequisites/Notes: Recommendation of a teacher and administrative approval.

208 Alternative Financial Algebra **1 Credit**

Alternative Financial Algebra is designed for students who need review, reinforcement, and increased support with their math curriculum, topics, and skills. This course includes a review of basic skills, specifically, the order of operations, decimals, fractions, percents and proportions. This course uses practical algebra and numerical approaches to solve business and personal-finance problems. Numerous topics from Algebra 1 are covered in financial contexts such as taxes, insurance, home and

auto ownership, and others. There is a focus on key concepts and learning objectives, with an increased emphasis on classwork.
Prerequisites/Notes: Recommendation of a teacher and administrative approval.

1001A Service Learning **1 Credit**
Service Learning is designed to introduce students to the world of community service, or deepen their prior knowledge and experience. This class will expose students to a variety of different hands on, community-based service learning projects in Gorham and greater Portland. Students will also take time to brainstorm, plan, budget, and reflect in the classroom. Students will write, discuss, and reflect about these different community service projects, providing them with a deeper understanding of the impacts of the service, both on the community and on the students. There will be a focus on classwork, along with behavior, effort, and attitude in the community.
Prerequisites/Notes: Recommendation of a teacher and administrative approval.

EDMENTUM COURSEWARE

Students may access the computer-based Edmentum Courseware to explore further study in areas of personal interest. Students should meet with a school counselor to discuss available options.

SAIL GUIDED STUDY HALL

Gorham's Gifted and Talented program, SAIL stands for **S**tudent **A**dvancement **I**n **L**earning. Students are encouraged to participate in SAIL Guided Study Hall based on previous program involvement or current referrals. SAIL Guided Study Hall sections operate in a manner similar to other Gorham High School study halls. In addition to providing a space for students to work independently on homework, the SAIL Guided Study Hall provides students with choices in enrichment and extension programming:

- Opportunities for students to pursue self-directed, for-credit enrichment explorations.
- Opportunities for students to work collaboratively on project-based learning and creative problem solving.
- A peer-supported classroom climate.
- Guidance and support from a teacher who is trained to monitor emerging needs, personal growth, and the development of academic and artistic talents.

Jobs for Maine's Graduates (JMG)

009 JMG 9 **1 Credit**
JMG 9 is a program that supports students with the transition from middle school to high school. The program focuses on increasing and reinforcing executive functioning, communication, social, and academic skills and habits. Additionally, throughout the program students will be involved in group process, team building challenges, and career exploration.

110 JMG 10 **1 Credit**

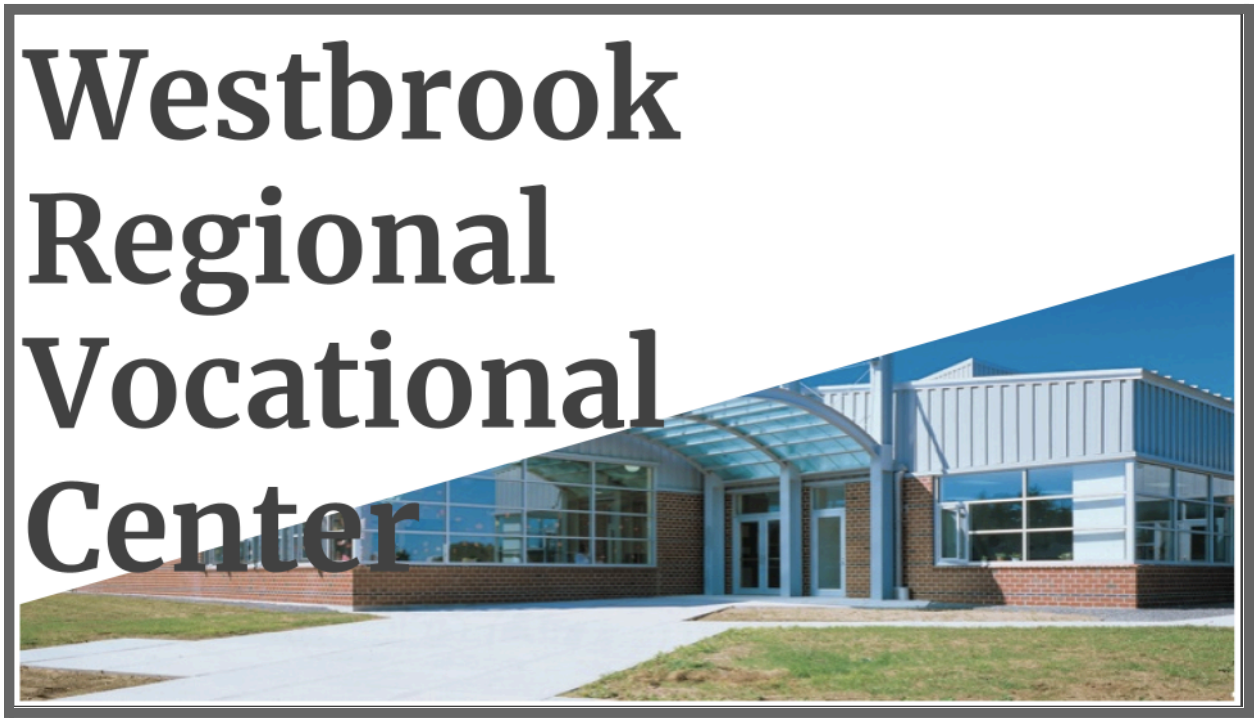
JMG 10 is for sophomores who are looking to gain "soft skills" for the workplace and connections to the community. Students will learn study skills and explore careers to begin to develop a post-secondary plan. Students will work closely with different organizations and businesses in the area through guest speakers, community service and philanthropy.

111 JMG 11 **1 Credit**

JMG 11 is for juniors who are looking to gain "soft skills" and “hard skills” for the workplace and connections to the community. Students will learn how to fill out applications, build resumes, write cover letters, learn study skills and develop a career or post-secondary education plan. Students will work closely with different organizations and businesses in the area through guest speakers, community service and philanthropy.

112 JMG 12 / Co-op **Up to 2 Credits**

JMG 12 is for seniors who have completed JMG 10 and/or 11, or have applied to a board of teachers and administration. Students will take the knowledge that was acquired during JMG 1 and use it to get a job and work a minimum of 10 hours a week. The coursework focuses on using the "soft skills" for the workplace, self-assessment, employability and career development skills. The teacher will follow up with employers and track progress and growth of students’ work skills and abilities. The course offers opportunities to display leadership and compete against other JMG schools across the state. In addition, the teacher will continue to follow up with students in post-secondary education or employers for a full year after high school.



Program of Studies 2024-2025[1]

125 Stroudwater Street
Westbrook, ME 04092
207-854-0820

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Our Philosophy

The staff of Westbrook Regional Vocational Center believes Career Technical Education (CTE) prepares students for entry into the labor force and/or post-secondary education. We offer all interested students a hands-on, task-oriented method of instruction that develops knowledge, skills, and attitudes for life and work. Our programs are designed to meet the community's changing technology-based labor demands and the student's need for quality, meaningful employment. WRVC has regular interaction with the community and industry through advisory committees, work-based learning projects, student organizations, and service-learning projects, which assist in keeping curriculum, methods, and materials current and relevant.

Additionally, WRVC believes students greatly benefit from having access to CTE learning as a component of their secondary education. We recognize students as life-long learners and encourage early awareness of CTE and post-secondary opportunities. Our approach to instruction is a combination of direct theory instruction, interdisciplinary, and project-based learning through live and work-based learning opportunities.

If a student has a need for trade-specific gear (steel toe boots, scrubs, toolbelt, etc), WRVC is glad to help students with financial needs to get the equipment, so they are properly equipped.

Workplace Readiness Skills

As Westbrook Regional Vocational Center is a school that is preparing students for life after high school, we believe that the standards identified below will set students up for success in the workplace, post-secondary learning, and/or their future endeavors.

1. Dress appropriately for the program and maintain good hygiene.
2. Maintain regular and punctual attendance.
3. Display a positive, can-do, attitude.
4. Demonstrate appropriate and safe workplace behavior.
5. A high level of maturity is needed in order to work independently and as a team.
6. Follow written and verbal directions.
7. Accept that learning is a process that involves hard work and dedication.
8. Respond appropriately to supervision and feedback.
9. Take initiative.
10. Keep materials organized.
11. Follow all safety guidelines and procedures while performing a task.
12. Communicate effectively with supervisors, peers, and clients.

Each program may have its own classroom agreement that showcases important safety or work-related expectations. These expectations will be upheld, monitored, and evaluated.

Importance of Attendance

Regular attendance is extremely important to Career and Technical Education as direct theory instruction, collaborative learning, and work-based live learning are difficult to replicate when students are absent. Moreover, our classes are two or more hours in length. Missing one day at WRVC is the equivalent of missing two class periods at a sending school.

Many WRVC policies and procedures reflect those found in the workplace rather than those typically found in a sending school. Therefore, if students have irregular attendance or chronic absenteeism, it could result in an attendance contract, the instructor not being able to recommend them for employment, and/or ultimately dismissal from the programs. Additionally, poor attendance could also result in an inability for the student to be eligible for third-party certification exams.

DE* Automotive Technology **950 Tech I 3 Credits**
951 Tech II 3 Credits

The Automotive Technology program follows the Automotive Service Excellence (ASE) Maintenance and Light Repair (MLR) standards for auto technician training programs. The 2-year automotive course involves 700 hours of training. The program consists of 350 hours of content education in a classroom setting and 350 hours of hands-on shop time. Each day in the program is one hour of class time and one hour of shop time. The program is half theory and half shop tasks, with a focus on safety and the completion of repairs according to manufacturer techniques and methods. Students are required to complete over 500 Automotive and safety-specific tasks. Course subjects are safety, battery and charging, steering and suspension, brakes, engine performance, electrical theory, and transmissions. In the classroom, students are required to complete and pass an online curriculum that meets the A.S.E standards as well as complete shop tasks to a proficient level. The online coursework is at the level of professional technicians and requires strong reading comprehension.

The program requires a well-rounded student with strong communication skills. The student needs to be an independent learner who is responsible, and interested in becoming a professional automotive technician. Students will work on customers' cars, interact with the public, follow repair procedures, read and write work orders and other correspondence, operate vehicles, and operate shop equipment in a safe and courteous manner.

Students will need to add, subtract, multiply and divide all units of measure, using whole numbers, common fractions, and decimals. Students need to calculate figures and amounts such as discounts, interest, commissions, proportions, percentages, area, circumference, and volume. Ability to apply concepts of basic algebra and geometry and necessary.

Automotive repair work requires students to have manual dexterity and fine motor skills. The ability to maintain physical endurance is important as there will be sustained periods of standing and

moving equipment. Please be advised that students will be lifting equipment that weighs over 50 pounds.

Prerequisites:
Strong reading comprehension and basic math skills are recommended.

Professional Licenses/Certifications:
Automotive Service Excellence (ASE)
SP2 Safety & Pollution Prevention certification
Maine State Inspection License
Today's class certifications

National Standards:
https://aseeducationfoundation.org/

Skills/Knowledge Gained:
- Completion of shop tasks related to A.S.E, MLR curriculum
- Shop and tool use
- Diagnostic skills and problem-solving
- Sequencing and organization
- Proficient service-writing skills
- Safe work practices

Textbook(s)/Programs:
MLR Automotive Technology
Today's Class

Dual Enrollment/College Credits:
(In the works for 2024-25 school year w/SMCC or CMCC for 10 college credits)
Introduction to Automotive Technology (3 Cr.)
Steering & Suspension (1 Cr.)
Breaks I (2 Cr.)
Electricity & Electronics (4 Cr.)

Entry-Level Career Opportunities:
Entry-level Dealership Technician
Retail or Wholesale Parts Representative
Tire-Mounting Technician
Service Writer
Detailer

Career Opportunities (with further education):
Advanced Technician

Service Manager
Independent Repair Facility Owner/Operator

Building Trades **952 Tech 1 3 Credits**
953 Tech II 3 Credits

Building Trades is a program designed for students who are interested in preparing for a career in carpentry or related fields. Students will have access to the latest in building technology and tools. The class will emphasize safety, skill development, and the proper use and care of hand, portable, and stationary power tools. Students will gain experience in building layout, rough and finish carpentry, estimating, blueprint reading, job site safety, quality workmanship, and customer service. Due to the nature of the work, students need to have strong basic math skills such as multiplication, division, fractions, and addition and subtraction, as they are used daily. Students in the program construct an energy-efficient spec house on-site over a two-year period.

Good hand-eye coordination and manual dexterity are a plus, as students will be climbing ladders, carrying heavy materials and equipment, as well as utilizing hand and stationary power tools. Students will regularly be standing, lifting, reaching, lifting, and working independently or collaboratively. They will experience building onsite and/or offsite which will involve dressing for all weather conditions. Students must display a commitment to safe behavior in the shop and while using power tools and equipment.

Prerequisites:
Strong basic math skills (ie: addition, subtraction, multiplication, division, and fractions) are needed and utilized daily in this program.

Professional Licenses/Certifications:
OSHA Occupational Safety and Health Administration 10-hour safety training

National Standards:
National Association of Home Builders:
https://www.maine.gov/doe/learning/cte/standards/buildingtrades
Residential Carpentry Standards and Competencies

Skills/Knowledge Gained:
- Safety procedures
- Use and care of hand tools, portable power tools, stationary woodworking equipment, ladders, and scaffolding
- How to identify, select, measure, mark, and cut common building lumber and materials
- How to assemble and install building materials on a construction site

- Develop valuable employability skills
- Framing– exterior and interior
- Roofing and siding
- Interior and exterior trim
- Blueprint reading
- Cabinet making

Textbook:
Residential Construction Academy Carpentry, Fifth Edition

Entry Level Career Opportunity:
Carpenter Apprentice

Career Opportunities:
Project Manager
Contractor
Site Supervisor
Business Owner

DE* Business **962 Tech I 3 Credits**
963 Tech II 3 Credits

The two-year Business program provides students with the opportunity to earn up to 15 college credits while being trained in business and human resource management, personal finance, accounting, and Microsoft Office. Students are also provided the opportunity to create and manage a virtual business through the Virtual Enterprise (VE) simulation program.

VE transforms students into business professionals and entrepreneurs by bringing the workplace into the classroom and replicates all the functions of real businesses in both structure and practice. Students will also participate in business competitions and trade shows throughout the year to present and market their virtual business in a competitive marketplace with other "firms" throughout the country. To learn more about the VE program visit www.veinternational.org.

Students who successfully complete the Business program can earn up to 15 college credits and certifications in Microsoft Office and Quickbooks.

Prerequisites:
Completion of ninth-grade English I or equivalent
Keyboarding skills are a plus but not required

Certifications students can earn:

Microsoft Office Specialist in Word, Excel, and PowerPoint Details here
Intuit Quickbooks Online Certified User Details here

National Standards:
National Business Education Association (NBEA) Standards
Common Career technical Core standards
Aligned to the Career readiness Framework (CRF) developed by Deloitte and VE

Skills/Knowledge Acquired:

- A greater awareness of conducting business in a global context
- The ability to develop problem-solving strategies
- The ability to work in teams and develop positive work relationships
- Improved business communication skills and communicating effectively in the workplace
- Workplace competencies
- An understanding of management objectives and organizational structures
- Planning, decision-making, technology and critical thinking skills
- Entrepreneurial skills and concepts
- Using Microsoft Word, Excel, and PowerPoint in the workplace
- Quickbooks and accounting applications
- The skills to manage people and lead small group activities
- The hiring practices that help improve a company's retention rate
- What is involved in evaluating employee performance
- Budgeting
- Saving and investing for long-term goals and retirement
- Obtaining credit and maintaining good credit
- Understanding the impact of interest rates and terms on loans
- Journalizing business transactions
- Reading common financial statements
- Maintaining records for a small business

Textbook(s) and Programs:
Glencoe Accounting (First-Year Course) Real-World Applications & Connections
TestOut (Online Hands-on Technology Software)
GMetrix (Online Skills Management system)
Budget Challenge (Online financial literacy program)
Microsoft Office applications
VE International Simulation

Dual Enrollment/College Credits:
Up to 15 college credits available

THOMAS COLLEGE

AC111 Principles of Accounting
MG224 Principles of Management
CS115 Intro to Microsoft Office
FN125 Personal Finance

HUSSON UNIVERSITY
BA311 Intro to Human Resource Management
(upon passing a proficiency exam with a designated minimum score)

Entry-Level Career Opportunities:
Administrative Assistant
Receptionist
Loan officer (with sales experience)
Client support assistant
Bookkeeper
Accounts Payable/Receivable Clerk

Career Opportunities (with further education and training):
Accountant
Auditor
Executive Assistant
Office Manager
Business Operations Manager
Financial Manager or Advisor
Human Resource Specialist
Legal or medical secretary

Commercial Driver's License (CDL) **958 Tech 1 3 Credits**
959 Tech II 3 Credits

Eligible students must hold a valid Maine driver's license and have a clean driving record. While automatic transmissions are increasingly common in the trucking industry, they are far from universal, so experience with a standard is a plus.

Commercial Driver's License (CDL) may be taken as either a one- or two-year program. Students who successfully complete this program will be eligible to earn a Class B or Class A Commercial Driver's License. Students who successfully complete a first year of training can test for a Class B license at the end of the school year and can test for a Class A license upon successful completion of their second year. Depending upon seat availability, seniors may enter the program at the Class A level.

This program follows a Maine BMV-approved curriculum and meets Federal requirements for entry-level training. Classroom topics include the operation of air brake systems, state and federal limits pertaining to vehicle size and weight, basic trip planning, legal limits imposed upon driving

time, general vehicle systems and vehicle inspections, and industry-related topics such as workplace safety, record keeping, and workplace procedures. The scope of classroom activities requires that students possess grade-level math and reading skills due to the complex, lengthy technical manuals.

To succeed in both the trucking industry and the program students must demonstrate significant problem-solving skills and the ability to function outside of direct supervision. Individuals who are poorly motivated are likely to struggle in both the program and the industry.

In addition to classroom instruction, students will receive range and road instruction in keeping with Maine and Federal guidelines. Range instruction includes straight-line backing, parallel parking, alley docking, as well as general vehicle maneuvering. Road instruction requires the student to operate in a wide range of driving situations.

- ★ Students must satisfy Federal drug testing requirements upon passage of the CDL permit test. Additional drug and/or alcohol testing may be required later. For safety considerations, students must meet the Federal medical standards that apply to professional drivers. Also, students must meet Maine BMV vision standards.

Prerequisites:
Completion of ninth-grade English
Completion of Algebra 1
Must hold a Class C Driver's License by October 1st of the year of entry into the program

Professional Licenses/Certifications:
Class B Driver's License
Class A Driver's License
Tank Vehicle Endorsement
Air Brake Permission

National Standards:
Federal Entry-Level Driver Training (ELDT) Standards

Textbook/Programs:
Federal Entry Level Driving (published by J.J. Keller)
Maine CDL Manual

Entry Level Job Opportunities:
Employment in construction, warehousing, and local pick-up and delivery

Related Career Opportunities (with additional education or training):
Heavy equipment operation
Diesel or automotive repair

IT Tech Support **985 I 3 Credits**
986 II 3 Credits

WRVC is proud to offer motivated students the opportunity to develop skills in the challenging and rewarding field of Information Technology (IT) support. Students enrolled in this program will be concurrently enrolled in Cisco Networking Academy, which offers students opportunities in basic computer network troubleshooting and design. The Computer Repair and Networking program will prepare students for either an entry-level IT job or post-secondary educational opportunities.

First-year student activities include disassembly, reassembly, and configuration of computer systems and basic network installations. Students will have access to the blended-learning platform provided by Cisco Networking Academy to supplement Networking labs and class lectures/readings. Students will be introduced to the mathematics of computers, including binary, hexadecimal, octal number system arithmetic, boolean algebra, and truth tables.

Second-year students will study advanced topics in IT Technical Support including Computer and Network Cyber Security, and Linux operating systems. Students will be encouraged to sit for the CompTIA A+, PC Pro certifications, or Cisco Networking Academy achievement certificates.

Professional Licenses/Certifications:
CompTIA A+ Certification
TestOut PC Pro Certification
TestOut Network Pro Certification
Cisco Networking Academy Certification

National Standards:
https://www.comptia.org/certifications/a
https://www.netacad.com/courses/networking/networking-essentials
https://w3.testout.com/pro-certifications/pc-pro
https://w3.testout.com/pro-certifications/network-pro

Skills/Knowledge Acquired:
- Design and troubleshoot ethernet networks
- Learn how to terminate and run CAT5e networking cables
- Repair and upgrade customer computers
- Configure, install and upgrade operating systems including Linux, iOS, and Android
- Troubleshoot and repair common computer and network issues
- Implement cybersecurity controls appropriate to help desk and tech support roles
- Plan and install home or small business networks using wireless technologies
- Develop critical thinking and problem solving using Cisco Packet Tracer software
- Verify and troubleshoot network and internet connectivity

- Recognize and mitigate security threats to a home network

Textbook/Programs:
Testout.com, Netacad.com
Mathematics for Data Processing Robert N. McCullough

Entry Level Career Opportunities:
IT Support Level 1 Help Desk
Network Technician
Field PC Repair Technician
Help Desk Technician

Career Opportunities (with further education):
IT Administrator
Cyber Security Specialist
Network Administrator

AP Computer Science & Multimedia **094 Tech I 3 Credits**
095 Tech II 3 Credits

In the Computer Science and Multimedia program, students will gain an understanding of programming and computer science. At WRVC, they work with Python, JavaScript, Java, Node Scripting, and C# programming languages. We emphasize creative thinking, abstraction, programming agnostic, syntax, design patterns, computer game development, debugging, and computational thinking in our computer science CTE program. Because of these mathematical algorithms, completion of Algebra 1 is necessary. Students can earn college credit by taking the AP Computer Science Principles course.

First-year students will program in Javascript, Python, and "Node scripting" as part of your Tech One experience. The AP Computer Science A course will focus on Java during Tech 2. This College Board curriculum imposes stringent and demanding expectations for reading, writing, and comprehension proficiency. During Tech Two, students will work in the Unity Game Development environment to learn the C# language and the professional development cycle. It is also possible to cover advanced Unity game development, as well as virtual reality. Come ready to experiment and implement ideas in a collaborative environment. Students will learn to use technology to solve problems and, most importantly, have fun doing it.

Students could qualify for two paid AP classes and two certifications in Cisco Python and Unity Jr Programmer after successfully completing Tech 1 & 2.

***With instructor approval, students can take the Tech 2 level of the program without Tech 1 experience.**

End Outcomes: AP College Credit (6), Certifications (2)

Prerequisites:
Completion of ninth-grade English I or equivalent
Completion of Algebra 1

Professional Licenses /Certifications:
Students can sit for their AP Java exam or Computer Principles exam.
Certiport certification in Unity User Programming

National Standards:
AP Exam (CSA- JAVA, CSP - Computer Science Principles)
Unity User certification (Jr Programmer) using Certiport/GMetrix
Cisco Python Basic User

Skills/Knowledge Acquired:
- Computational and organizational skills
- Program management and organization
- Hand coding skills in Java, Javascript, Python, C#, and Web Languages
- Game Development and programming with FlowLab.io, and Unity Game Development Program

Dual Enrollment/College Credits:
AP Computer Science Principles (upon successful completion of AP Exam)
AP CSA Java (upon successful completion of the AP Exam)

Textbook(s)/Programs:
Code.org, ProjectStem.com, Cisco Python online Curriculum, CSAwesom.com, freecodecamp, Unity Learn C# (GMetrix certification).

Entry Level Job Opportunities:
Jr Software Development
Media Engineer
Entry level Programmer
Jr Software Engineer
Entry-level Unity game developer

Career Opportunities (with further education):
Software Development
Media Engineer
Programmer
Software Engineer

Cosmetology **991 Tech I 3 Credits**

Cosmetology involves the study of the art and science of the care of hair, skin, and nails. A cosmetologist can choose to specialize in one or more areas such as makeup artistry, lash extensions, weddings, master colorist, barbering, spa treatments, or nail enhancements. Self-motivated, creative, artistic students and students with strong interpersonal skills will be interested in our Cosmetology program, which will train them for licensing and employment in related fields.

In this program, students learn to apply their technical and interpersonal skills. Instruction in human anatomy & physiology, and chemistry provides students with a deeper understanding of the scientific aspects of hair, skin, and nail care. This two-year program allows students interested in the field of Cosmetology to begin their training by earning state-mandated hours required for a Maine Cosmetology license over the two years. These hours will transfer to post-secondary Cosmetology schools and enable students to begin their studies with a portion of the program completed. The curriculum utilized in this program is written at a post-secondary level, so having a strong foundation in English and science will help ensure student success.

Prerequisites:
Completion of ninth-grade English I or equivalent
Proficiency in basic math skills (ie: addition, subtraction, multiplication, division, ratios, percentages, and fractions)

Professional Licenses /Certifications:
Up to 700 seat hours credited toward the required 1500 state licensure hours

National Standards: https://www.maine.gov/doe/learning/cte/standards/cosmetology

Skills/Knowledge Acquired:
- Hair styling and shampooing techniques
- Hair coloring formulation
- Hair coloring and haircutting techniques
- Safe usage of chemicals
- Sanitation procedures
- Nail care
- Esthetics

Textbook(s)/Programs:
https://www.pivot-point.com/product/fundamentals-cosmetology-book-set/
https://www.pivot-point.com/schools/lab-digital-platform/

Career Opportunities (with further education):
Hair Stylist
Barber
Esthetician
Makeup Artist
Salon Manager
Nail Technician
Brand Ambassador

DE* Criminal Justice **937 Tech I 3 Credits**
939 Tech II 3 Credits

Criminal Justice is an all-encompassing program that covers many facets such as, law enforcement, forensics studies, crime scene processing, law studies, corrections as well as a variety of other United States Criminal Justice system specialty areas. For those students who do not wish to pursue a career in law enforcement, they may be interested in the forensic science, dispatcher, law, psychology, and mental health service pathways this field offers. Course readings, writing, and reflection will focus on current events, interpreting and comprehending case law reviews, and criminal and federal statutes.

Physical training and team workouts will be a regular part of this program. Personal growth goals will be established to support student success in gaining endurance and strength. Students will work towards lifting a minimum of 50 lbs (ie: protective gear, weights, sandbags, lifting people, manikins). Students will also have an introduction to police weaponry and receive training from State of Maine-certified fire-arms instructors in the identification, use, and deployment of police weapons. Tactical training will include appropriate use of force such as takedown techniques and self-defense. Students wishing to join this program should possess the desire to respect and abide by safe practices at all times and lead with integrity.

The subject matter of this course is completely dependent on mature and responsible behaviors. Because law enforcement is such a versatile and ever-changing profession, officers today are exposed to a wide variety of situations that are not often witnessed by the everyday person. The course readings, law enforcement trials/videos, and discussions will contain sensitive material and information. Students should be prepared that this information can be very emotionally heavy, and can be difficult to process. This material is important in developing a professional attitude and fostering empathy to help serve and protect their communities going forward.

Prerequisites:
Completion of ninth-grade English I or equivalent

National Standards:
American Heart Association (AHA) Basic Life Support (BLS) and Heartsaver (CPR & First Aid)
Stop the Bleed Certification
OSHA 10 (Public Safety)

Police One Academy certified trainings (State approved)
FEMA ICS 100 & 700 Certifications

Skills/Knowledge Acquired:

- Self Confidence
- Healthy Life Choices
- Community Outreach
- Radio Communication
- Report Writing
- Investigations
- Defensive Tactics
- Crime Scene Processing
- Mental Health Training
- Basic Psychology

Dual Enrollment/College Credits:
SMCC (6 college credits)
Introduction to Criminal Justice
Applied credits of standards (WRVC attendance)

Textbook(s)/Programs:
Brightspace through SMCC
PoliceOne.com

Entry Level Career Opportunities:
E-911 Dispatcher
Private Investigator
Security officer
Employment opportunities for local and state LE agencies

Career Opportunities (with Further Education):
Border Patrol
Police Officer
Special Agents with Federal agencies
Game Warden
Forest Ranger
Forensic Specialists
Cyber Security
Lawyer/Law Studies
Military Service
Mental Health Services
Bailiff/Court Security

SWAT/SRT
Corrections (Jail/Prison Systems)

DE* Culinary Arts **964 Tech I 3 Credits**
965 Tech II 3 Credits

Students will learn about and practice food preparation, service, and presentation of meals, quantity food production, bakeshop, table service, catering for community organizations, and cake decoration. Students will learn the preparation of stocks, classical "Grande Sauces," appetizers, hors d'oeuvres, sandwiches, entrees, and desserts. Interest, natural ability, and food skills are determining factors in the progress of the student.

Students will be expected to work collaboratively, demonstrate creative thinking skills and artistic appreciation and utilize a variety of professional tools. They will have to clean and lift heavy pots and pans that may be hot. It should be noted that the kitchen can be a hot environment as well, and students will be standing for long periods of time while working in these warm temperatures. These experiences will prepare students to enter the food service industry.

Included within this program are the National Restaurant Association's ProStart® curriculum proficiencies for secondary education. Students will be expected to use basic math skills that relate to the foodservice industry. Students will be expected to utilize safety at all times, as well as follow all sanitizing procedures. Students will also practice basic knife skills.

In order to develop a palate memory of flavors and textures, students are required to taste everything produced in class. The only exception to this would be religious or a doctor-confirmed allergy.

- ★ This class works with all the Big Eight Allergens (milk, eggs, fish, Crustacean shellfish, tree nuts, peanuts, wheat, and soybeans)

Prerequisites:
Proficiency in basic math skills that relate to the food service industry

Professional Licenses /Certifications:
The Safe Food Handler in the first year
ServSafe *Food Production Manager certification* in second year

Textbook(s)/Programs:
National Restaurant Association's ProStart levels 1&2
ServSafe 7th Edition

National Standards:
National Restaurant Association
American Culinary Federation

College Credit:
Southern Maine Community College
CULA 102- Introduction to Culinary (3 credits)
CULA 103- ServSafe (1 credit)

Skills/Knowledge Acquired:
- Proper safe kitchen procedure
- Use and care of knives
- Slicing, dicing, julienne
- Basic butchery
- Seafood processing
- Mise en Place organization
- Menu planning and development
- Oral and written communication
- Creativity and flavor pairing
- Ordering, receiving, and proper storage of food and related products
- Preparation and cooking of a wide variety of foods
- Proper sanitation practices

Entry Level Career Opportunities:
Chef's assistant
Line cook
Prep cook
Baker's assistant
Dining room server

Career Opportunities (with further education):
Chef
Baker
Restaurateur, Catering
Personal and private chef

DE* Early Childhood Occupations Education **956 Tech I 3 Credits**
957 Tech II 3 Credits

The Early Childhood Occupations Education program will prepare you for a variety of careers working with children. Most of our graduates continue in the many options available in this field. Some of our past graduates teach preschool, elementary school, and even middle school. While other students work in daycare centers as assistant teachers, lead teachers, and directors, and some have opened

their own daycare facilities. There are endless opportunities in this field; some students are working as social workers, physical therapists, or occupational therapists.

During the first year of the program, we explore many job opportunities and we operate a lab nursery school where everyone is a student teacher working with three to five-year-olds. As you continue into the second year of the program it becomes more specialized. You teach four to five-year-olds in the lab nursery school for part of the year and the other part of the year is focused on your interests. You will get a chance to have field experience in the field of your choice. We want to make sure you have the opportunity to learn about what your career path may be like. For example, if you would like to be an elementary school teacher you will spend time in a local school helping in the grade of your choice.

Over this two-year program, we will be building a professional portfolio that will allow you to earn the Certified Early Childhood Assistant that is awarded through Maine Roads to Quality. This certificate allows a student to leave high school with a level 3 status. We have a partnership with some of the local community colleges and everyone will leave with a college transcript with at least 13 college credits. There is also a possibility to earn another 3 college credits with the instructor's recommendation. Please note that our textbooks are written at a college level.

Prerequisites:
Completion of ninth-grade English 1 or equivalent

Professional Licenses/ Certifications:
American Red Cross First Aid and CPR
State of Maine Certified Early Childhood Assistant (CECA)
ServSafe Handler
Mandated Reporter

National Standards:
National Association of Education Young Children

Skills/Knowledge Acquired:
- Teaching skills for letters, numbers, colors, shapes, self-help
- Health and safety of children
- Organization/lesson planning
- Snack/Lunch preparation
- General bookkeeping
- Oral and written communication
- Teamwork
- Creative Thinking
- Record Keeping

Dual Enrollment/College Credits - 16 possible credits:

Central Maine Community College
- Intro to Early Childhood Education
- *Guidance and Self Regulation

Kennebec Valley Community College
- Observing Young Children
- Children's Literature

University of Maine Farmington
- Child and Adolescent Development

Textbook(s)/Programs:
Children's Books in Children's Hands
Week by Week
Beginnings and Beyond
The Developing Person

Entry-Level Career Opportunities:
Nanny
Assistant Teacher at a daycare center
Ed Tech 1

Career Opportunities (with further education):
Elementary / Middle / High School Teacher
Lead Teacher in a daycare setting
Social Worker
Guidance Counselor
Special Education Teacher
Occupational Therapist
Child Psychologist
Daycare Administrator
Speech Therapist

DE* Electricity **968 Tech 1 3 Credits**
969 Tech II 3 Credits

This program is designed to provide entry-level skills in the electrical field. Students learn to install wiring systems according to the current edition of the *National Electrical Code*. Participants will learn to wire residential and commercial projects. Students will also develop industry-standard safe working practices. Physics and advanced mathematical calculations are used frequently, along with college-level reading and writing skills. The *NFPA Electrical Code Book* is written at a college level. Students are exposed to real-world situations, such as oral business practices and finances. Students are expected to work collaboratively, be respectful, have strong communication skills, and also be self-motivated and work independently.

This program requires moving and climbing ladders, using the scissor lift and being high off the ground, lifting heavy equipment, and being able to distinguish colors. Safety is paramount as students will be working with electrical currents and equipment in dangerous scenarios; therefore, students are expected to be focused, responsible, and mature.

Prerequisites:
Completion of ninth-grade English I or equivalent
Completion of Algebra 1

Professional Licenses/Certifications:
Electrician Helper's License
576 Classroom Hours as well as 1000 hours for attending a CTE program will be applied towards a Journeyman Electrician license (dependent on attendance)
OSHA-10 Certification
Ladder Certification
Scissor Lift Certification

National Standards:
National Fire Protection Association-70E

Skills/Knowledge Acquired:
- Install the electrical for a residential dwelling.
- Properly operate power tools.
- Understanding the NFPA 70E Code Book
- Calculate service size, feeders, box and conduit fill, etc.
- Bending conduit
- Generator hook-up
- Solar
- Commercial wiring
- Troubleshooting equipment
- Low Voltage wiring
- Construction norms

Dual Enrollment/College Credits:
State of Maine Articulation Agreement

Textbook(s)/Programs:
House Wiring/Residential Construction
NFPA 70E National Electrical Code

Entry Level Career Opportunities:

Electricians Helper
Apprentice
Data and Communication Technician

Career Opportunities (with further education):
Master Electrician
Self-employment
Engineer
Vocational Teacher
Inspector
Traffic Signals
Control Technician
Security
Home Entertainment
Maintenance
Among many more occupations!

DE* Emergency Medical Technician (EMT-B) 941 Tech 1 3 Credits

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EMT is a one-year course of study for mature juniors and seniors who want to serve their community in a growing public safety field. This course provides students with the entry-level knowledge and skills necessary to render prehospital medical care to the sick and injured. It also provides the foundation for advanced training in ParaMedicine. In order to participate in this program, all EMT students must accept the dual-enrollment agreement we have with Southern Maine Community College. The textbook and learning expectations will be at the college level, students needing accommodations would need accommodations approved by SMCC. Students in this program must attend regularly and be able to lift heavy objects. (Preference to seniors)

Through discussion, practical labs, and clinical verifications students are introduced to patient assessment, airway, and respiratory problems, cardiopulmonary resuscitations, oxygen therapy, bleeding control, shock management, soft tissue injuries, fracture care, spinal immobilization, patient triage, and obstetrical, pediatric, environmental and behavioral emergencies. Many students take Firefighting as a junior and move on to the EMT course as a senior.

NOTE: The required age for National Registered EMT-B candidates in Maine is 18 years old at the time of the exam, a student under 18 can still test and receive a Maine license.

Prerequisites:
Completion of ninth-grade English I or equivalent
Anatomy and Physiology recommended but not required

Professional Licenses /Certifications:
Nationally Registered Emergency Medical Technician - Basic (NREMT)
Maine licensed EMT-B
AHA CPR
Federal Emergency Management Agency (FEMA) National Incident Management System (NIMS) 005, 100, 200, 700, 800

National Standards:
US DOT for EMS Basic-EMT

Dual Enrollment/College Credits:
7 college credits

Southern Maine Community College
Basic EMT license with Maine EMS

Textbook(s)/Programs:
AAOS Emergency Care and Transport of the Sick and Injured 12th edition
SMCC online access through Brightspace

Career Opportunities :
Private Ambulance services
Municipal Fire services
Advanced Life Support, including Paramedic **(with further education)**

DE* Fire Fighting **948 Tech I 3 Credits**

Fire fighting is an inherently dangerous job where the ability to follow orders, identify hazards, operate safely and efficiently as a team or individual, and be in top physical condition are paramount. Students will lift and carry up to 80 pounds while performing live firefighting exercises in a team while in full protective gear. Students will learn how to climb, carry, and extend ladders up to 35 feet, and rescue victims from hazardous atmospheres. Students need to have the ability to work in confined spaces and use fire service terminology.

Fire Fighter I & II is a one-year course of study based on the latest *Standards for Fire Fighter Professional Qualifications*. There is a strong emphasis on weekly readings, research, and terminology. Upon successful completion of this program, you will qualify to test for State Certification in Fire Fighter I & II. Area colleges that offer Fire Science programs typically award up to 6 college credit hours for this nationally recognized certification.

Students enrolled in this program must show maturity as the material covered is sensitive and must participate in rigorous physical fitness training and attend classes without repeated absences.

Students are also highly encouraged to become junior firefighters in their local fire departments, allowing them to gain insight into the daily roles and responsibilities as well as vital field experience of the Fire and EMS Service.
While in the class, students will gain knowledge of best safety practices, how to teach fire safety, mitigate hazardous material scenes, use and maintain fire service tools and equipment, search and rescue victims from hazardous atmospheres and operate hose lines, ladders, and other standard firefighting equipment.

Prerequisites:
Completion of ninth-grade English I or equivalent
Minimum age for taking the firefighting exam in Maine is 16 years old

Professional Licenses /Certifications:
Fire Fighter I & II Certification
NIMS ICS 100, 200, 700
AWR 160
Hazardous Materials Operations

National Standards:
NFPA 1001, Standard for Fire Fighter Professional qualifications as set by Maine Fire Service Institute
Using the Jones and Bartlett curriculum

College Credits (if they apply to SMCC):
Up to 6 college credits available

Southern Maine Community College
Firefighting I (Maine)
Firefighting II (Maine)

Textbook(s)/Programs:
Jones and Bartlett Firefighter Skills
Jones and Bartlett Workbook for Firefighter Skills
TEEX Hazardous Materials Operations Class

Entry Level Career Opportunities:
Full Time Firefighter
Live-in Student Firefighter
Per-Diem Firefighter

Career Opportunities (with further education):
Fire Lieutenant
Fire Captain
Fire Chief

Inspector

Heavy Equipment Operation **970 Tech I 3 Credits**
971 Tech II 3 Credits

Heavy Equipment Operation (HEO) provides students with the opportunity to learn and practice operation skills on a variety of equipment used in various fields. Topics covered in this program include basic construction safety, introduction to site and road layout, identification of heavy equipment, preventative maintenance, and proper operation of heavy equipment. Basic operator skill development will begin on excavation simulators and continue with the operation of machinery. Students will learn basic skid steer, bulldozer, loader backhoe, telelift, and excavator operation. Students will be expected to climb into the equipment and operate the machinery independently. Safety is paramount in this program as the equipment is dangerous; therefore, a high level of maturity and independence is necessary.

Additionally, students can obtain a 10-hour OSHA safety certificate. The student textbook will be from the *National Center for Construction Education and Research*. Class and lab work will be supplemented with field trips to job sites, local mining (gravel) pits, and dealerships. Good hand-eye coordination and manual dexterity is a plus. Students must display a commitment to safe behavior in the classroom and while operating equipment out on the range.

Students will be required to wear OSHA-compliant footwear while performing hands-on tasks (OSHA standard 1910.136). It is expected that students will perform maintenance tasks that may require lifting 50 lbs or greater. Be aware, this program involves being outside regardless of weather conditions.

Random drug testing may be performed while the student is enrolled in the program.

Prerequisites:
Proficiency in addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals.
Proficiency in finding the following: perimeter, area, volume, slope angles, and understanding Pythagorean Theorem.
Ability to accurately read a measuring tape in feet, inches, and fractional increments.

Certifications:
10-hour OSHA safety certificate

Skills/Knowledge Acquired:
- Heavy equipment operation
- Basic equipment maintenance

- Site layout and construction
- Safety practices
- Blueprint reading
- Setting grades
- Problem-solving
- Leveling and Surveying
- First Aid
- Rigging
- Road & driveway construction
- Sedimentation and erosion control
- Dig safe requirements

Textbook(s)/Programs:
National Center for Construction Education and Research, Heavy Equipment Operations, Level One & Two

Entry Level Career Opportunities:
Construction laborer
Equipment operator
Asphalt laborer
Landscape Laborer

Career Opportunities (with further education):
Diesel Mechanic
Site Supervisor
Project Management
Landscape Designer

DE* Medical Occupations **974 Tech I 3 Credits**
975 Tech II 3 Credits

Medical Occupation is a program where students are able to investigate different professions within the healthcare system. Students spend a great deal of time applying practical healthcare skills related to subjects such as anatomy, physiology, pathology, pharmacology, and medical terminology. Students will be required to read, write, and present case studies about current topics in class. Successful students in this program have a growth mindset, and are self-driven, organized, and independent learners. Many live-learning experiences will require maturity, collaboration, and the ability to perform well under pressure.

This program provides a strong foundation for those interested in a career in the medical field. Over two years, students have the opportunity to earn a certification as a Certified Nursing Assistant. Those that choose to participate in the CNA program will be required to attend 70 hours of on-site training at a local nursing facility, and pass a state exam. Clinical on-site training happens on evenings, weekends, and school vacations. Full vaccinations are required to participate in clinical trials. Over two years, students can earn up to 7 dual-enrollment college credits with Southern Maine Community College.

Physical Demands:
Lifting, reaching overhead, pushing and pulling can be a component of patients and/or equipment. Requires sufficient vision and hearing to detect changes in a client's physical condition. Occasional lifting up to 50-75 pounds.

Prerequisites:
Completion of 9th-grade English I or equivalent
Completion of Biology
Minimum age for taking the exam in Maine is 16 years old

Professional Licenses/Certifications:
Certified Nursing Assistant (CNA)
OSHA 10 General Industry Healthcare
American Heart Association (AHA) Basic Life Support (BLS)
American Heart Association (AHA) Heartsaver (First Aid)
State of Maine Mandated Reporter Training Certificate

National Standards:
Maine CNA Standard

Skills/Knowledge Acquired:
- Anatomy & Physiology
- Medical Terminology
- Pharmacology
- Fundamental healthcare skills
- Research
- Understanding of the healthcare system
- Communication

Course Activities:
Dissections/Anatomy in Clay
CPR & First Aid training
Guest speakers
Simulation labs and equipment

Field trips
Wellness activities

Dual Enrollment/College Credits:
Up to 7 college credits

Southern Maine Community College
Introduction to Health Sciences HLTH 100-H8 (3 credits)
Medical Terminology HLTH 105-H8 (3 credits)
Freshman Interest Groups: Intro to Healthcare Careers FIGS 102-H5 (1 credit)

Textbook(s)/Programs:
Nursing Assisting: A Foundation in Caregiving. Hartman Publishing Inc. Dugan. D. 2016, 4e.

Workbook for Nursing Assisting: A Foundation in Caregiving. Hartman Publishing Inc. Dugan. D. 2016, 4e.

Medical Terminology for Health Professions. Ehrlich & Schroeder, Delmar, Cengage Learning, 2013

Clinical Skills: Skills for Nurse Assisting. *Clinical skills online*. Elsevier. 2018
Hartman's Complete Guide for the Phlebotomy Technician. Hartman Publishing Inc. 2020.
I'm Here-Compassionate Communication in Patient Care. *Ella Press*. Engel M., 2020.

MindTap for Schroeder/Ehrlich/Schroeder Smith/Ehrlich's Medical Terminology for Health Professions, Instant Access | 9th Edition

Entry-Level Career Opportunities:
Certified Nursing Assistant
Dental Assistant
Hospital Unit Helpers
Phlebotomist
Patient Support Specialist

Career Opportunities (with further education):
Registered Nurse
Physical Therapist
Occupational Therapist
Medical Social Worker
Radiology Technician
Respiratory Therapist
Dental Hygienist
Surgical Technician
Physician
Dentist
Pharmacist

Westbrook Regional Vocational Center

✔ denotes half a credit earned unless otherwise specified

CTE Program @ WRVC	English Tech 1	English Tech 2	Math Tech 1	Math Tech 2	Science Tech 1	Science Tech 2
	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Automotive Technology	✔	✔		✔ (1 credit)	✔	✔
Building Trades			✔	✔		
Business Education	✔	✔	✔			
Commercial Truck Driving						
Computer Repair & Networking				✔ (1 credit)	✔	✔
Computer Science & Multimedia					✔	✔
Cosmetology						✔
Criminal Justice	✔	✔			✔	✔
Culinary Arts						✔
Early Childhood Occupations	✔	✔	✔			✔
Electricity	✔	✔	✔	✔	✔ (1 credit)	✔ (1 credit)
Emergency Medical Technician (One year only)		✔			✔ (1 credit)	
Firefighting (One year only)	✔				✔	
Heavy Equipment Operations			✔	✔		
Medical Occupations	✔	✔		✔ (1 credit)	✔ (1 credit)	✔ (1 credit)

PORTLAND ARTS + TECHNOLOGY HIGH SCHOOL

My education. My choice.

Portland Arts and Technology High School

Auto Collision Technology	**Biomedical & Health Sciences**
Auto Tech	**Landscapes and Gardens**
Carpentry	**Marine Systems**
Careers in Education	**Masonry**
Commercial Art	
Culinary Concepts	**New Media**
Cybersecurity	**Plumbing and HVAC**
Dance	**Welding/Metal Fb**
Food Services	**Woodworking**

Automotive Collision 902 3 Credits

The Automotive Collision program offers the opportunity for students to learn and practice all aspects of the automotive collision industry. Students will learn how to analyze damage and write estimates on CCC estimating software, repair body damage, remove and align body panels, repair bumper covers with Polyvance Nitrogen plastic welders and 3M repair procedures and more, during the non-structural/structural classes. The paint and refinishing classes offer learning opportunities for students such as; mixing and matching paint using our computerized mixing bank and scales, applying etching primers, primer surfacers, sealers, base and topcoats using professional HVLP spray guns in our downdraft Devilbiss paint booth. Steel MIG welding is also a priority during both years to earn a I-CAR MIG (GMAW) welding certification. Partnerships with local shops provide students with first-hand experience into the industry. Students who complete the program can further their education or enter into the workforce as a collision technician, damage estimator, automotive refinisher and more.

Curriculum:

Non-Structural:

Hazardous Materials, Personal Safety, and Refinish Safety
Trim and Hardware
Bolted-On Part Replacement
Movable Glass

Plastic and Composite Repair
Lighting, Starting, and Charging Systems
Automotive Foams
Vehicle Construction Material Types
Vehicle Technology and Trends 2019
Measuring Structural Damage
MIG Welding
Paint and Refinishing:
Trim and Hardware
Corrosion Protection
Waterborne Products, Systems and Application
Solvent products, Systems and Applications
Hazardous Airborne Pollutant Reduction
Liquid and Solid Hazardous Waste Storage and Disposal Overview
Detailing

Textbooks:
Inter-Industry Conference on Auto Collision Repair

National Standards:
Inter-Industry Conference on Auto Collision Repair
National Automotive Technicians Education Foundation

Certifications:
ASE: Automotive Education Foundation
I-CAR: Inter-Industry Conference on Auto Collision Repair
S/P2: Safety & Pollution Prevention

Suggested Integrated Academic Credit:
Career Prep
Science

Is This Program A Fit ?

I enjoy…
- Working with cars
- Working with my hands
- Working with people and customer service

I am able to…
- Critically Think- assessing damaged vehicles and what it will take to repair, including cost
- Maintain Physical Dexterity- moving around a vehicle and into small spaces
- Pay Attention to Detail- having a good eye for detail to get a car looking like new
- Perform Technical Skills- using a wide range of tools and dangerous equipment safely

I am comfortable with…
- Math- arithmetic skills including multiplication and division
- Reading- interacting with technical documents
- STEM- science, technology, engineering, mathematic
- Writing- creating comprehensive damage repair plans

DE* Automotive Technology 903 3 Credits

The Automotive Technology program provides students with skills to develop a thorough understanding of the design, construction, and operation of automotive systems. During their two-year involvement with this program, students are taught how to troubleshoot, service and repair modern automobiles. Using the most up-to-date technology available, students are prepared to face the challenges of today's automotive industry needs. National affiliations with the SkillsUSA, Automotive Service Excellence (ASE) national workplace learning, and ongoing placement opportunities with local dealerships provide practical skill development and first-hand experience in the industry. Students who complete the program can further their education or enter into the workforce as an automotive technician, brake specialist, tire specialist, service writer, parts specialist and more.

Curriculum:
Year I:
Shop Safety
Measurement Fasteners and Tools
Lubrication System
Cooling Systems
4 Cycle Theories
Engine Rebuild
Electricity
Ignitions Systems
Fuel Systems
Computer Controls
Emissions
Year II:
Wheels and Tires
Brakes
Steering and Suspension
State Inspection
Engine Performance
Live Shop Work

National Standards:
Automotive Service Excellence

Certifications:
ASE: Automotive Service Excellence
Ford Service
Maine State Inspection License
S/P2: Safety & Pollution Prevention
Valvoline Oil

College Credit:
Southern Maine Community College
AUTO 101- Introduction to Automotive Technology (1 credit)
AUTO 102- Automotive Maintenance and Light Repair (2 credits)
AUTO 111- Steering & Suspension (2 credits)
AUTO 116- Breaks I (2 credits)
AUTO 155- Electricity & Electronics (4 credits)

AUTO 175- Internship/Cooperative Education (3 credits)

Suggested Integrated Academic Credit:
Career Prep
Math
Science

Is This Program A Fit?

I enjoy…	I am able to…	I am comfortable with…
‣ Solving technical problems ‣ Working with cars ‣ Working with my hands ‣ Working with people and customer service	‣ Be a Learning Person- the automotive industry is always growing and changing ‣ Maintain Physical Dexterity- move around a vehicle and into small spaces ‣ Perform Technical Skills- use a wide range of tools and dangerous equipment safely ‣ Problem Solve- issues under the hood of a vehicle aren't always obvious to determine	‣ Math- arithmetic skills including multiplication and division, decimals and basic algebra ‣ Reading- interacting with technical documents ‣ STEM- science, technology, engineering, mathematics ‣ Writing- creating repair orders

DE* Biomedical & Health Science 912 3 Credits

The Biomedical and Health Science program provides students with the opportunity to explore three different tracks: nursing, dental or veterinary. The first year will introduce students to different careers in health sciences. Students will study anatomy, physiology, nutrition, diet therapy, and complete a medical research project through field trips, demonstrations, and classroom instruction. The second year prepares students in basic health science skills, body mechanics, aseptic techniques, and medical terminology. Students are placed in a clinical experience of their choice during the second semester to gain valuable hands-on experience in the industry; clinicals are held twice a week in the evening after school. Students who complete the program can further their education or enter into the workforce as a Certified Nursing Assistant, Dental Aide, Veterinary Aide and more.

Curriculum:
Year I:
Principles of Biomedical Science (first semester)
In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine the factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.
Human Body Systems (second semester)
Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis in the body. Exploring science in action, students build organs and tissues on a skeletal Manikin®; use data acquisition software to monitor body functions such as

muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases

Year II:

Program of Study Nursing Assistant, Dental Assistant or Veterinary Assistant (first semester)

Students learn about their desired course of study. They go through the curriculum and learn the skills needed to work in the field. Once they have practiced their hands on materials students then attend on the job training.

Medical Interventions and basic Math (second semester)

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

Textbooks:

Hole's Human Anatomy & Physiology
Medical Terminology A Living Language
Veterinary Assisting Fundamentals & Application
McCurnin's Clinical Textbook for Veterinary Technicians
Dental Assisting: A Comprehensive Approach
Dental Radiography Principles and Techniques
Nursing Assisting A Foundation in Caregiving
Nursing Assistant A Nursing Process Approach
Medical Law & Ethics
Medical Math

National Standards:

Certified Nursing Assistant
Dental Assisting National Board
Project Lead The Way

Certifications:

CNA: Certified Nursing Assistant
CRMA: Certified Residential Medication Aide
First Aid & CPR
RHS/ICE: Dental Radiation Health and Safety & Infection Control

College Credit:

Central Maine Community College
MET 111- Medical Terminology (3 credits)
MEA 165- Medical Ethics and Law (3 credits)
Southern Maine Community College
BIOL 132- Anatomy and Physiology I (4 credits)
FIGS 102- Introduction to Healthcare Professionals (1 credit)
HLTH 100- Introduction to Health Sciences (3 credits)

Suggested Integrated Academic Credit:

Career Prep
English Language Arts

Science

Is This Program A Fit?

I enjoy…	I am able to…	I am comfortable with…
‣ Helping people and/or animals ‣ Working as a member of a team ‣ Working under pressure and demonstrating patience	‣ Communicate- speaking with patients and their families in addition to routinely communicating with coworkers ‣ Maintain Physical Endurance- sustained periods of standing and ability to lift ‣ Perform Technical Skills- use fine motor skills for the use of dissection tools and also take blood pressure etc. ‣ Use Interpersonal Skills- dealing with and relating to patients, understanding their body language, and understanding their concerns and needs in a compassionate manner	‣ Math- arithmetic skills including fractions, decimals, percentages, ratios, multiplication and division ‣ Reading- interacting with medical text ‣ Science- knowledge of the basic principles of biology ‣ Writing- conveying scientific concepts and clinical information in written form

DE* Careers in Education 944 3 Credits

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

Curriculum:

Developmentally appropriate curriculum content and implementation
Child development
Intentional teaching strategies
Positive behavior guidance and classroom management strategies
Learning environments
Family engagement
Adapting for individual differences

Cultural inclusivity
Professionalism

Textbooks:
Effective Practices in Early Childhood Education: Building a Foundation
Those Who Can, Teach

National Standards:
National Board for Professional Teaching Standards
National Association for the Education of Young Children

Certifications:
Health and Safety
First Aid & CPR

College Credit:
Central Maine Community College
EDU 101- Introduction to Education (3 credits)
Southern Maine Community College
ECED 100- Introduction to Early Childhood Education (3 credits)

Suggested Integrated Academic Credit:
Career Prep
English Language Arts
Health
Science
Social Studies

Is This Program A Fit?

I enjoy…
- Creating activities and having an active imagination
- Helping others
- Working with children

I am able to…
- Be Creative- creating innovative lesson plans and activities that engage all children
- Communicate- listening and communicating with children
- Display Patience- working with children who are full of energy and curiosity
- Use Interpersonal Skills- dealing with and relating to children and families understanding their concerns and needs, as well as working with other members of the classroom team

I am comfortable with…
- Reading- interacting with technical text about child development
- Social Studies- studying child growth and development, family systems, and issues that impact children and families
- Writing- reporting children's daily progress as well as essays, newsletters and other written communication

Carpentry 938 3 Credits

The Carpentry program is designed to instruct students in all types of house construction and remodeling. Students are involved in foundation layout work, house framing, and exterior and interior finish carpentry work. Students work with a variety of building and finishing materials, and become familiar with modern methods and styles of commercial and residential construction. An integral component of the curriculum involves live hands-on shop work, allowing the students to practice all phases of house construction. Major projects will include the construction of a shed and house. Students who complete the program can further their education or enter into the workforce as a framing carpenter, mill worker, finish carpenter and more.

Curriculum:
Year I:
Basic Safety (OSHA 10)
Introduction to Construction Math
Introduction to Hand Tools
Introduction to Power Tools
Introduction to Construction Drawings
Basic Communication & Employability Skills
Introduction to Material Handling
Year II:
Orientation to the Trade
Building Materials Fasteners and Adhesives
Hand and Power Tools
Introduction to Construction drawings, Specifications and Layout
Floor Systems
Wall Systems
Ceiling Joist and Roof Framing
Introduction to Building Envelope Systems
Basic Stair Layout
Roofing Applications
Exterior Finishing
Cabinetmaking and Installation (Optional)

Textbooks:
Core Curriculum: Introductory Craft Skills Trainee Guide
Carpentry Level 1 Trainee Guide
National Standards:
National Center for Construction Education and Research
Certifications:
NCCER: National Center for Construction Education and Research
OSHA: Occupational Safety and Health Administration 10-Hour Safety
College Credit:
Eastern Maine Community College
BCT 103- Intro to Framing, Safety & Code Compliance
Suggested Integrated Academic Credit:
Career Prep
Math
Is This Program A Fit?

I enjoy…
- Working as a member of a team
- Working with my hands
- Working with people and customer service

I am able to…
- Maintain Physical Endurance- sustained periods of standing and ability to move materials
- Pay Attention to Detail- ability to follow blueprints and building plans
- Perform Technical Skills- using a wide range of tools and dangerous equipment safely
- Work Collaboratively- work cooperatively and professionally with classmates

I am comfortable with…
- Math- arithmetic skills including fractions, decimals, percentages, ratios, multiplication and division
- Reading- interacting with technical documents
- STEM- science, technology, engineering, mathematics

DE* Commercial & Advertising Art 904 3 Credits

The Commercial & Advertising Art program introduces students to the fields of Graphic Design and Illustration through traditional and digital media techniques from a historical and contemporary lense. There is strong emphasis on learning how to visually communicate clear and creative ideas to an audience through creative problem solving skills. Using the Adobe Suite software, students will have the ability to finalize and produce print ready work including but not limited to logo design, sequential art, character design, book covers, greeting and postcard design, poster advertisements and animated GIFs. Students have the opportunity to gain college credit and live work experience during the program if they are in academic good standing. After completing the program, students will have a portfolio to further their education or enter into the workforce in a design related field.

Curriculum:
Color Theory
Principles and Elements of Design
Traditional Illustration Techniques
Printmaking
2D Design Basics
Adobe CC Software
Page Layout and Design
Scanning Images
Digital Image Editing
Concepts of Typography
Digital Portfolio

National Standards:
GAERF Advertising and Design
National Core Standards: Media Arts

Certifications:
NOCTI Advertising and Design

SkillsUSA Advertising and Design

College Credit:
Southern Maine Community College
ARTS 130- 2D Design (3 credits)
York County Community College
ART 126- Foundations of Design (3 credits)
MUL110- Digital Imaging (3 credits)

Suggested Integrated Academic Credit:
Career Prep
Fine Arts

Is This Program A Fit?

I enjoy…
- Creating on a computer using software
- Stretching myself to generate many ideas for a project
- Using my imagination and expressing myself through art
- Using new mediums to create art
- Working for extended periods of time

I am able to…
- Be Creative- developing concepts, graphics and layouts for product illustrations, company logos, websites etc.
- Communicate- listening and communicating with clients to support collaborative professional relationships.
- Pay Attention to Detail- when working with clients to determine their creative and time requirements as well as budget
- Receive Feedback- listen and process feedback to develop a product clients are happy with
- Work at a computer for extended periods of time

I am comfortable with…
- Critique- sharing and talking about my work with others
- Fine Art- basic art skills
- Interactive Media- using technology such as Adobe creative software to develop innovative designs
- Writing- conveying data and work in a clear, digestible way to clients

Culinary Arts 905 3 Credits

The Culinary Arts program is designed to prepare students for immediate entry into the exciting world of culinary professionals. You will learn the tools to be successful in a commercial kitchen from sanitation, kitchen basics, nutrition, knife skills and more. The program also covers dining room service including waitressing, meal, table and customer service through the use of a live cafe. You will also learn the base from which you can branch out into writing a food blog or restaurant and product reviews; become a food photographer or salesperson. Students learn the basics of entrepreneurship in developing menus and playing with recipes and marketing strategies, so you can open your own business. Students who complete the program can further their education or enter into the workforce as a prep cook, baker, restaurant manager, food buyer, restaurant reviewer and more.

Curriculum:
Preparing for a Successful Career

Kitchen Basics
Food Service Equipment
Sanitation
Preparing & Serving Safe Food
Preventing Accidents & Injuries
Nutrition
DMIT Tourism & Retail
Lodging Industry
Art of Service
Successful Customer Relations
Marketing & Menu
Controlling Food Services Cost & Business Math
Purchasing & Inventory Control
Breakfast Foods & Sandwiches, Salads & Garnishes, Fruits & Vegetables, Potatoes & Grains, Desserts & Baked Goods, Meat, Poultry, Seafood, Stocks, Soups, & Sauces

Textbooks:
Foundations of Restaurant Management and Culinary Arts
Introduction to Culinary Arts

National Standards:
National Restaurant Association
American Culinary Association

Certifications:
NOCTI: National Occupational Competency Testing Institute
ServSafe

College Credit:
Southern Maine Community College
CULA 100- Introduction to Culinary Arts (3 credits)

Suggested Integrated Academic Credit:
Career Prep
Fine Arts
Math
Science

Is this program a fit?

I enjoy…
- Learning about different cultures and their food
- Working with food
- Working with people and customer service
- Working under pressure

I am able to…
- Communicate- speaking with customers and maintaining polite professional relationships
- Follow Directions- follow recipes and directions of the Chef
- Pay Attention to Detail- be precise in ordering food products, measuring the ingredients or figuring out what time to cook certain food items
- Perform Technical Skills- use a wide range of tools and dangerous equipment safely

I am comfortable with…
- Math- measurements and arithmetic skills including fractions, decimals, addition, subtraction, multiplication and division
- Reading- interacting with technical texts
- Writing- composing essays, news articles, and other written communication.

DE* Cybersecurity 923 3 Credits

This program is an introduction into the exciting world of careers in Cybersecurity. This program will take you in many directions highlighting roles as an analyst, penetration tester, systems administrator and computer crime investigator. You will learn priceless skills in this program to help keep you, your family and eventual employer safe on the internet for many years to come. The program will be a constantly evolving experience starting with the basics of security but also studying current and evolving threats facing the real world security landscape. Collaboration and teamwork will be critical to the success of a student in the program. Students who complete the program can further their education or enter into the workforce as a security consultant, ethical hacker, information security analyst and more.

Curriculum:
Learn the fundamentals of an Information Technology Infrastructure
-End User Devices
-Servers
-Network Devices
Familiarize yourself different authentication methods
Focus on the CIA triad of Cyber Security and best practices
-Confidentiality
-Integrity
-Availability
Hands on practice securing networks of different sizes and scopes
How to gather evidence and maintain a chain of custody

Textbooks:
TestOut IT Fundamentals Pro
TestOut Security Pro

National Standards:
National Initiative for Cybersecurity Education Workforce Framework

Certifications:
CompTIA IT Fundamentals
CompTIA Security+
Palo Alto PCCSA

College Credit:
Southern Maine Community College
CMIT 100- Introduction to Information Technology (3 credits)
UMaine Augusta
ISS210- Introduction to Information Systems Security (3 credits)

Suggested Integrated Academic Credits:
Career Prep
Science
Social Studies

Is This Program A Fit?

I enjoy…
- Being a lifelong learner
- Solving technical problems
- Working with computers

I am able to…
- Be Self Directed- manage my time effectively and maintain attention to detail
- Communicate- verbal and written communication to support collaborative professional relationships with colleagues
- Commit To Ethical Behavior- with the use of technology and networking
- Problem Solve- find creative ways to take on and address complex information security challenges

I am comfortable with…
- Math- arithmetic skills including multiplication and division
- Technology- troubleshooting, maintaining, and updating information security systems
- Writing- to support collaborative professional relationships with colleagues

Dance 940 3 Credits

Dance is a performance based program for students interested in pursuing a professional experience in the performing arts. Technique classes include modern dance technique, ballet technique, Afrobeat and hip hop. Technique class has a consistent form, a sequence of exercises and movement combinations that repeat, vary, or build, from class to class. While students acquire improved skills and a feel for the depth and rigor of technical dance training, the class is taught from the perspective of dance as art making. Students participate in 2-3 sessions per week called, Making Dances. Making Dances sessions happen after technique class and focus on choreography and dance composition (where students learn set material that will be made into a dance piece) and where students are asked to make original material based on a variety of themes and improvisational tools. There are several opportunities for special one day workshops with professional instructors and choreographers in a wide range of subjects. Previous workshops have featured guest teachers in fields such as salsa dancing, Capoeira, West African dance and drumming, theater, musical theater studies, Quebecois

step–dancing. Students who complete the program can further their education or enter into the workforce as a choreographer, dancer and more.

Curriculum:
Modern Dance and Ballet Technique
Afrobeat and Hip Hop Technique
Choreography
Introduction to Pilates/Core (Strengthening and Conditioning for Dancers)
Making Dances and Introduction to Dance Composition
Special Projects and Workshops With a Variety of Guest Artists in a Variety of Dance Styles and Interdisciplinary Art Forms

Textbook:
The Anatomy of Exercise and Movement

National Standards:
California Career and Technical Education Model Curriculum Standards for Dance

Suggested Integrated Academic Credit:
Career Prep
Fine Arts
Physical Education/Health

Is This Program A Fit?

I enjoy…	I am able to…	I am comfortable with…
‣ Being active ‣ Creating dance choreography ‣ Performing for an audience	‣ Maintain Physical Endurance- sustained periods of standing, and participating in and facilitating gross motor activities ‣ Work Collaboratively- work cooperatively and professionally with classmates	‣ Communication- effective communication to support collaborative professional relationships ‣ Science- human anatomy and nutrition and their impact on the bodies ability to perform

Food Service 908 3 Credits
The Food Service program prepares students for entry-level employment in the food service industry. This exciting program offers hands-on experience and learning through the operation of a student-run café. Students receive a varied hands-on education in food preparation, equipment usage, sanitation, personal hygiene, customer relations, teamwork, attitude, initiative, and independence. Students are supported to meet their needs with a focus on building self-confidence, independence, and collaborative working skills. Students who complete the program can further their education or enter into the workforce as a prep-cook, counter server, dishwasher and more.

Curriculum:
Safety: Personal, Equipment, Food, General Kitchen
Sanitation
Personal Hygiene
Manipulative Skills: Knife Usage, Hand Tools, Stationary and Portable Equipment, Techniques

Recipes: Ingredient Identification, Measurement, Following Directions, Proper Tool Usage
Table Service: Table Setting, Service, Selling Product
Work Affect: Attitude, Collaborative Skills, Participation
Personal Affect: Leadership Skills, Mentoring, Giving and Receiving Feedback

Certification:
ServSafe Food Handlers

Suggested Integrated Academic Credits:
Career Prep
Math

Is This Program A Fit?

I enjoy it…	I am able to…	I am comfortable with…
‣ Working with food ‣ Working with people and customer service	‣ Communicate- working with customers and maintaining polite professional relationships ‣ Follow Directions- follow multi-step written and verbal instructions while maintaining safety and quality of work ‣ Perform Technical Skills- use a wide range of tools and dangerous equipment safely	‣ Math- use of basic arithmetic skills including addition, subtraction, fractions, decimals, and money skills including coin and bill identification ‣ Reading- comprehension of technical documents including recipes and daily work logs ‣ Writing- ability to effectively complete daily assignments

DE* Horticulture 914 3 Credits

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

Curriculum:
Garden Preparation/Design
Sales and Marketing
Aquaponics/ Hydroponics
Pruning
Floral Design
Plant Identification/Maintenance
Integrated Pest Management
General Greenhouse Operations

Agritainment
Workplace Readiness
Sustainable Agriculture/Vegetable Production
Soil and Nutrients
Maple Production

National Standards:
Plant Systems Pathway CIP 01.0601 Applied Horticulture uses NCAE Plant Systems

Suggested Integrated Academic Credits:
Career Prep
Science

Is This Program A Fit?

I enjoy…	I am able to…	I am comfortable with…
‣ Creating and maintaining landscape installations ‣ Growing plants and learning about natural food production ‣ Working outside on my feet ‣ Working with dirt and soil	‣ Communicate- work cooperatively and professionally with customers and coworkers ‣ Use Gross and Fine Motor Skills- for hands-on work, including but not limited to mulching and maintaining garden beds ‣ Work Independently- follow multi-step written and verbal instructions while maintaining safety and quality of work	‣ Science- greenhouse productions, aquaponic and outdoor food production ‣ Writing- ability to effectively complete daily assignments

Marine Service Technology 928 3 Credits
The Marine Service Technology program offers many opportunities for students to find their interests in one or more skill sets in the field. The course is designed to teach the necessary theoretical and practical skills to prepare and educate individuals to become competent marine technicians with career readiness skills and an aptitude for the industry. Students will gain the ability to diagnose, repair, install and rebuild multiple marine systems, inboard and outboard engines, diesel engines, AC & DC electrical, marine electronics and composite boat building and repair. Partnerships with local boatyards provide students with valuable hands-on experience in the industry. Each section of the program includes a large portion of shop time in order to strengthen the student's hands-on skills. All Certification tests are optional and not graded as part of the curriculum. Students who complete the program can further their education or enter into the workforce as a boatyard technician, boat builder, small engine mechanic and more.

Curriculum:
Year I: Small Engine
Shop safety, tools & measurements, fasteners & sealants, engine construction, theory & operation of 2-stroke & 4-stroke engine, small engine maintenance, troubleshooting, repairs, rebuilding,

carburetion, ignition systems, lubrication systems, cooling systems, customer service skills, basic DC electrical theory & installation, battery systems, introduction to marine composites & coatings.
Year II: Marine Systems
Customer service skills, introduction to boat handling, navigation, & safety, outboard & inboard engine maintenance, troubleshooting & repair. Advanced DC electrical theory, troubleshooting & installation. Fuel injection systems. Marine diesel & support systems. Marine electronics installation & troubleshooting. Advanced marine composite repairs & coatings. Seasonal maintenance & shrink wrapping.

Textbooks:
Fundamentals of Marine Service Technology
Small Gas Engine
Diesel Engine Technology
USCG Navigation Rules & Regulations Handbook

National Standards:
American Boat and Yacht Council
National Electrical Code
Occupational Safety and Health Administration
United States Coast Guard- Code of Federal Regulations

Certifications:
ABYC: American Boat and Yacht Council
NMEA: National Marine Electronics Association
OSHA: Occupational Safety and Health Administration 10-Hour Safety
SP2: Valvoline Oil
Yamaha

Suggested Integrated Academic Credit:
Career Prep
Math
Science

Is This Program A Fit?

I enjoy…
- Solving technical problems
- Working with boats
- Working with my hands

I am able to…
- Maintain Physical Dexterity- move around a vehicle and into small spaces
- Pay Attention to Detail- having a good eye for detail to get a boat looking like new
- Perform Technical Skills- using a wide range of tools and dangerous equipment safely
- Work Collaboratively- work cooperatively and professionally with classmates

I am comfortable with…
- Reading- interacting with technical documents
- Math- arithmetic skills including multiplication and division
- STEM- science, technology, engineering, mathematic

Masonry 922 3 Credits

The Masonry program is designed to instruct students in the different aspects of masonry. Students learn shop and job safety practices and procedures while developing the skills of design and layout. Projects such as fireplaces, steps, planters and more will be done using brick, block, dry stone and decorative precast concrete. Students receive related instruction in blueprint reading, layout work, measurement, sketching, and estimating. Students who complete the program can further their education or enter into the workforce as a mason tender, bricklayer, contractor, tile setter and more.

Curriculum:
Hardscaping
Crane Rigging
Masonry Tools and Equipment
Measurements, Drawings, Specifications
Mortar
Masonry Units
Installation Techniques

Textbooks:
Masonry: Brick and Block Construction

National Standards:
Home Builders Institute
National Association of Home Builders

Certifications:
Forklift
OSHA: Occupational Safety and Health Administration 10-Hour Safety

Suggested Integrated Academic Credit:
Career Prep
Math
Is This Program A Fit?

I enjoy…
- Being creative in hardscape design
- Being physically active
- Working with my hands

I am able to…
- Maintain Physical Endurance- moving heavy materials and equipment around shop floor
- Pay Attention to Detail- having a good eye for detail
- Perform Technical Skills- using a wide range of tools and dangerous equipment safely

I am comfortable with…
- Math- arithmetic skills including multiplication and division
- Reading- interacting with technical documents
- STEM- science, technology, engineering, mathematic

DE* Music 924 3 Credits

The Music program is designed to teach students how to interpret and perform many contemporary musical styles from Rock to R&B, Pop to Jazz and Funk. There are three aspects of the program: performing, music theory and recording studio. Students perform four times a year, with one evening rock show off campus. Students will study music theory, arranging, songwriting, and the ins and outs of the music business. The audio engineering component of the program is unique in its approach to introducing students to recording, mixing, music production and live sound. Students receive instruction in recording, mixing, editing, a foundation in the physics of sound and electricity, and an in-depth survey of popular music fundamentals. With plenty of hands-on opportunities, students learn engineering techniques with cutting edge ProTools software. Students will record each other to create an album at the end of every year. Students who complete the program can further their education or enter into the workforce as a performer, composer, producer, sound mixer and more.

Curriculum:
Music Theory
Sight Reading/ Ear Training
Dictation
Songwriting
Performance
Audio Recording

Textbook:
The Musician's Guide to Fundamentals

National Standards:
NCCAS: National Standards for Arts Education

College Credit:
Southern Maine Community College
MUSI 110- Fundamentals of Music (3 credits)

Suggested Integrated Academic Credit:
Career Prep
Fine Art

Is This Program A Fit?

I enjoy…
- Expressing my emotions while performing music
- Learning music technology
- Performing for an audience
- Playing an instrument and/or singing and developing new skills/musical mediums

I am able to…
- Be Assertive- in musical ideas and concepts
- Be a Learning Person- exploring various music genres
- Receive Feedback- listen and process feedback and be reflective in my strengths and weaknesses
- Sing and/or play a complete song and match pitch

I am comfortable with…
- Communication- effective communication to support collaborative professional relationships with my classmates/bandmates
- Reading- interacting with technical documents

DE* New Media 942 3 Credits

The New Media program introduces students to the basics that all new media producers need using state of the art equipment and software. Every student will learn the basics of graphic design, project design and management, shooting and editing video. New Media students will learn these concepts while learning how to use Adobe's Creative Cloud focusing on Adobe PhotoShop and Premiere Pro. Introductory topics include concepts in graphic design, project design and management, and introduction to video creation and editing. Advanced topics include broadcast programming, scriptwriting and basic animation. Students who complete the program can further their education or enter into the workforce as a video editor, production assistant and more.

Curriculum:
Cameras
Digital Media Storage
Electronic Field and News Production Techniques
Studio Production Techniques
Microphones and Sound Gathering
Lighting - types and new methods
Editing - different software and techniques
Digital Photography - styles, lighting and post-editing
Photoshop- photo editing and graphic design
Internet Usage

National Standards:
MAB: Maine Association of Broadcasters

College Credit:
Southern Maine Community College
CNMS 160- Video & Audio Production Basics

Suggested Integrated Academic Credit:
Career Prep
Fine Arts

Is This Program A Fit?

I enjoy…	I am able to…	I am comfortable with…
‣ Creating scripts and storyboards ‣ Using my imagination ‣ Using video and recording technology	‣ Be Creative- developing video shots and project management ‣ Work Collaboratively- work cooperatively and professionally with classmates	‣ Communication- effective communication to support collaborative professional relationships ‣ Interactive Media- using technology

Plumbing & HVAC 926 3 Credits

The HVAC and Plumbing trades correlate in many ways and this program ties the two together by covering the many aspects of both professions through classroom theory, hands-on applications in the shop, and real life scenarios provided by the instructor. In Plumbing we cover topics such as faucets / fixtures, water distribution, drainage, venting, and water heaters. In the end we bring these lessons together by building functioning bathrooms in our house mock-up. In HVAC topics such as oil and gas heating systems, roof top units (RTU), pumps, air conditioning systems, and equipment are covered. Time is spent maintaining the school's HVAC units located on the roof. We also cover the specialty tools, installation techniques, troubleshooting, and repair of the systems and equipment associated with both HVAC and Plumbing. The program itself is associated with, and supported by many great companies and continuing education programs to help dedicated students find job placement, or further their knowledge after graduation. Students who complete the program can further their education or enter into the workforce as a residential or commercial plumber, HVAC technician, pipe fitter, AC specialist, and more.

Curriculum:

Plumbing Year:

Soldering, Speciality Tools, Water Supply, Drainage, Waste, Vents, Water Heaters, Well Pumps, and Installations and Repairs

HVAC Year:

Speciality Tools, Oil and Gas burners, Hot Water Loops, Steam Systems, Roof Top Units and Air Handlers, Heat Pumps, Mini Splits, and Installations and Repairs

National Standards:

National Center for Construction Education and Research

Certifications:

Aerial Lift
EPA 608
OSHA: Occupational Safety and Health Administration 10-Hour Safety

Suggested Integrated Academic Credit:

Career Prep
Science

Is This Program A Fit?

I enjoy it…
- Problem solving technical issues
- Using technology to find solutions to problems
- Working with my hands

I am able to…
- Maintain Physical Endurance- sustained periods of standing and ability to move materials
- Perform Technical Skills- using a wide range of tools and dangerous equipment safely
- Work Collaboratively- work cooperatively

I am comfortable with…
- Math- arithmetic skills including multiplication and division
- Reading- interacting with technical documents
- STEM- science, technology, engineering, mathematic

DE* Welding 936 3 Credits

The Welding program provides students with the opportunity to gain fundamental welding skills needed to be employed in the welding/ fabrication industry. Students will be trained in the safe use of various hand tools such as grinders, oxy-fuel torches, plasma cutters, and portable band saws. Instruction will be given in the use of an array of measuring and layout tools used in the welding trade. Students will learn to read and interpret welding symbols and blueprints used in welding/fabrication shops. Performance tests are administered throughout the program that focus on using shielded metal arc welding (Stick), gas metal arc welding (MIG), flux cored arc welding, and gas tungsten arc welding (TIG) on various materials such as carbon steel, stainless steel, and aluminum. Second-year students will have the opportunity to take the American Welding Society D1.1 limited structural plate test, which will give them an entry level welding certification. Advanced students will have the opportunity to try their hand at pipe fitting and pipe welding both carbon and stainless steel. Students who complete the program can further their education or enter into the workforce as an entry level welder.

Curriculum:

Safety
Equipment Operation
Oxygen- Acetylene Safe Set Up
Electrical Safety
SMAW Flat Pos. Horizontal position, Rod I.D. / Uses
SMAW Vertical- O.H. Paddle / Plate Tests for Certification
Math for Welders
Blueprint Reading for Welders
Welding Workbook
Fabrication Techniques
GMAW (Gas, Metal Arc Welding) Performance Tests
FCAW (Flux Cored Arc Welding) Performance Tests
SMAW (Shielded Metal Arc Welding) Performance Tests
Plasma Cutting
Carbon Arc Cutting
Pipe fitting / Pipe Welding Performance Tests
GTAW (Gas Tungsten Arc Welding) Performance Tests

Textbooks:
AWS Fundamentals Of Welding
GW Welding Fundamentals

National Standards:
American Welding Society

Certification:
AWS: American Welding Society D1.1 Limited Structural Plate

College Credit:
Southern Maine Community College
WELD 100- Introduction to Welding (3 credits)

Suggested Integrated Academic Credit:
Career Prep
Math

Is This Program A Fit?

I enjoy…
- Fabricating and building things with steel
- Learning new skills and applying them in real world settings
- Working with my hands

I am able to…
- Maintain Physical Endurance- sustained periods of standing and ability to move materials
- Perform Technical Skills- using a wide range of tools and dangerous equipment safely
- Possess Manual Dexterity & Hand Eye Coordination

I am comfortable with…
- Math- arithmetic skills including multiplication and division
- Reading- interacting with technical documents
- STEM- science, technology, engineering, mathematic

Outdoor Education and Leadership

Description:
Outdoor Education and Leadership is a 2-year program that serves as an experiential pathway for students interested in careers or post-secondary education in the outdoor industry, including outdoor education, adventure programming, recreation management, parks and public land management, youth programming, environmental conservation, and other aspects of the outdoor field. This course is suitable for students who love the outdoors and are willing to be physically, mentally, and academically challenged while developing their leadership skills, teamwork, and ability to engage with the natural world as their classroom. Students will gain a solid foundation in outdoor education and leadership theories and methods while gaining the necessary technical skills to be leaders in outdoor settings. This new program is in response to the growing demand for qualified and trained specialists in the outdoor industry here in Maine. Students who complete the program can further their education or enter into the workforce as an adventure guide, park ranger, game warden, and more.

Curriculum:
Year One: Foundations in Outdoor Skills and Environmental Awareness
In the first year, students will establish a foundation of outdoor skills while learning about the critical principles of adventure-based programming, environmental stewardship, and group dynamics. ● Core outdoor skills, including camp basics, wilderness survival, backcountry cooking ● Introduction to ecological systems, conservation practices, plant/animal ID, and Leave No Trace Principles.

- Essential navigation techniques and map reading skills.
- Challenge course experience and the educational concepts behind facilitating and processing with groups.
- First aid, safety protocols, hazard assessment, and risk management training.
- Team building and leadership development through collaborative challenges.
- Essential industry certifications (Year One)
- Experience and familiarity with outdoor classroom and place-based learning through relationships with on-site and some off-site locations.

Year Two: Advancing Skills and Career Readiness
In the second year, students will deepen their knowledge of best practices and essential outdoor leadership skills while gaining more experience in the field and connecting with industry professionals. Students will choose a concentration to focus their skill-building in the outdoor field.

- Exploring careers: Outdoor education, adventure recreation, public land management, and other industry possibilities.
- Advanced outdoor skills and essential industry certifications (Year Two)
- Proven strategies and experience teaching and leading diverse outdoor programs and activities. ● Planning and managing trips and outdoor events.
- Practical experience working with youth outside.
- Learn about public land policies, conservation initiatives, and wilderness ethics.
- Career exploration opportunities are available through networking with industry professionals, speakers, and field visits.
- Experience off-site wilderness trips as participants and leaders.

Textbooks:

TBD

National Standards:
TBD
Certifications:

- Educational Trip Leader
- Wilderness First Aid/AED/CPR
- Leave No Trace Trainer
- Basic Search and Rescue
- Preparation for Registered Maine Guide Test
- Boaters' Safety
- Paddlesports Safety
- Lifeguard/Water Safety Instructor
- Swiftwater Rescue
- Ropes Course Facilitator
- Avalanche Level 1
- FEMA Intro to Incident

Suggested Integrated Academic Credit:
Physical Education
Science

Is This Program A Fit?

I enjoy…

- Being outside in nature for hours
- Observing animals, plants, and human interactions through the seasons
- Challenging myself to learn new adventure and outdoor skills
- Helping others and working as part of a team

I am able to…

- Problem Solve- assess and address situations and actions necessary in a given environment and make good-decisions
- Maintain Physical Endurance sustained periods of activity and gross motor skills
- Take Leadership- take a leadership role or a supporting role as needed
- Work Collaboratively- work cooperatively and professionally with classmates

I am comfortable with…

- Communication- effective communication to support collaborative professional relationships
- Reading- interacting with technical documents, instruction manuals, and academic texts
- Writing- ability to effectively complete daily assignments