Course Descriptions/Programs of Studies Skowhegan Area High School 2020 - 2021

The Skowhegan Area High School Guidance Department has developed the Course Description/Program of Studies Book to provide parents, students, and community members with important information regarding SAHS academic opportunities and available services. We are proud of the many course choices and supports that are offered to SAHS students.

The Guidance Office is available to all students, parents, and teachers to assist in planning academic schedules, career paths, post-secondary education, and dealing with issues of a more personal nature. Trained counselors are available by appointment and on a walk-in basis when possible.

Counselors consult with and make referrals to out-of-school agencies. They work closely with the administration, teaching staff, and parents on behalf of the students.

Students will see their counselors several times during the year whether in groups, classrooms, or individually. If you have any questions regarding any of the following information please call 474-2403.

GRADUATION REQUIREMENTS

Please reference www.msad54.org/sites/default/files/IKF_1

GRADING SCALE

A+ 99,100	A 95-98	A- 93,94
B+ 91,92	B 87-90	B- 85,86
C+ 84,83	C 78-82	C- 76,77
D+ 74,75	D 71-73	D- 70

WEIGHTED GRADING

Weighted grading will be applied to all SAHS Honors and Advanced Placement (AP) classes. The weighting factor is a 5% addition to the earned grade. Quarterly report card grades will indicate the actual grade earned. However, the GPA of each student involved in an honors and/or AP class will reflect the 5% weighted grades.

CLASS RANK

Class Rank is determined by a student's cumulative grade point average. Cumulative grade point average is calculated four times during the school year at the end of each quarter. Initial class rank will be determined once a student has attended Skowhegan Area High School four consecutive quarters.

HONOR ROLL and ACADEMIC LETTER

Honor Roll is calculated after each ranking period; and to be eligible, a student must be enrolled in a minimum of 5 courses or its equivalent. Pass/Fail courses do not contribute to honor status. Any student receiving all A's is placed on the All A's honor roll. Any student receiving A's and B's, or all B's with an average of 90 is placed on High Honors. Any student receiving all A's, B's or one C, with no grade lower than 80 is placed on Honors. Any student earning honors or better also earns points toward a Skowhegan Area High School Academic Letter, awarded every spring in a special ceremony. 12 points are required to earn an Academic Letter: All A's = 3 points, High Honors = 2 points; Honors = 1 point. All points must be earned at Skowhegan Area High School to qualify for a SAHS Academic Letter.

COURSE SELECTION

Course sequence and elective choice for each year are important matters. They deserve very thorough consideration by students and their parents. Before making final decisions, students should obtain as much help and advice as possible from their teachers, counselor and parents. Students must remain mindful of the competitive nature of all post-secondary educational opportunities and commit to taking four years of appropriately rigorous and diverse course work. It is the student's responsibility to keep track of credits earned and to sign up for remaining graduation requirements.

- 1. At a formal class meeting, each student will receive a description of course offerings. The general group session will give counselors the opportunity to discuss SAHS courses and other learning opportunities with students. Students will have the opportunity to participate in this discussion. They will then make preliminary elective course selections.
- 2. Teachers will make appropriate level recommendations for each of their students' required academic classes.
- 3. The counselors will review the course selections. The appropriateness of each student's course selections will be determined based on graduation requirements, student ability and their educational/career plans.
- 4. At the end of the school year, some changes may be necessary because of low or failing grades. It is the responsibility of the student to contact his/her counselor to make changes. Counselors are available a week after school ends and a week before a new year begins to address needed changes.

AP/HONORS COURSES

Philosophy

The Advanced Placement (AP) and Honors programs offer students exposure to college-level materials and accelerated learning opportunities. These courses are designed to challenge highly motivated, committed students. AP and Honors courses require commitment on the part of the student to complete assignments outside the classroom, both during the summer and the school year. AP also provides students an opportunity to demonstrate their learning through performance on an AP exam. Some colleges/universities may award credit to a student earning a designated score (determined by the individual post-secondary institution) on an AP exam.

Enrollment

Students in AP/Honors courses offered in a classroom setting at SAHS will enroll "in house." Only if a significant scheduling conflict prevents a student from enrolling "in house" will the student be allowed to enroll in an equivalent course via a virtual or other alternate platform.

Initial enrollment in AP/Honors courses will be based on teacher recommendations. If a student or parent/guardian would like to discuss the reasons for the placement recommendation, a meeting among relevant parties (i.e., student, parent/guardian, recommending teacher, AP/Honors teacher, guidance counselor, content area curriculum leader) will take place. If the meeting does not result in consensus concerning the student's placement, the student or parent/guardian may appeal the determination to the principal, who will make the final determination after conferring with relevant parties.

AP Exam Fees

RSU 54 pays the full cost of each AP exam. Because the College Board charges the district an additional fee for each unused exam, a student who withdraws from an AP course after the exam has been ordered or who has an unexcused absence from an AP exam will be required to pay the additional fee. Documented medical issues or extenuating personal circumstances would be considered in this process.

ADDING/DROPPING CLASSES

If at all possible any needed add/drop should be handled before the beginning of a school year. Guidance counselors are available a week after the school year ends and a week before the school year begins to address specific scheduling needs.

Although students are expected to remain in a course once a course begins, it may be possible for a student to add or drop a class after the start of a semester. Adding or dropping must happen within the first two weeks of the start of a class unless unusual circumstances arise. Student add/drop may be allowed after thorough consideration of the rationale for the requested change and the student, a parent/guardian, the guidance counselor, and the teacher have all signed the required procedural paperwork. Completion of this paperwork is the responsibility of the student. Until approval for the change occurs students are expected to remain in and attend the currently scheduled class. When a student drops a class after the first two weeks of a year course or a semester course with no logical academic rationale, the course will remain on the student's permanent record with a designation of withdrawn (W).

AUDIT

A course audit is a privilege offered to students who need to strengthen skills and understanding of a subject area. Students who audit a class are expected to attend all classes, complete all assignments and take all required assessments. Course credit is not earned for an audit. An audit form must be submitted (available in Guidance).

INDEPENDENT STUDY

On occasion independent study courses may be arranged for in depth study not offered in the curriculum or other isolated circumstances. The student and supervising teacher must submit an independent study proposal (available in Guidance).

EXTERNAL COURSES

SAHS encourages students to pursue external educational opportunities for a variety of reasons including intellectual growth, recovery of credit, to enrich their high school experience, and to help establish pathways toward academic success. External courses must be approved by the principal and the student's guardian prior to enrollment. The approval form is available in the guidance office. It is the student's responsibility to provide his/her guidance counselor with an official transcript following completion of an external course. Approved external learning experiences will be used to determine athletic eligibility. Approved external learning opportunities that are numerically graded will also be used to determine honor roll status and GPA.

POST-SECONDARY ENROLLMENT OPTIONS

Secondary students from RSU 54/MSAD 54 may earn credits towards graduation by taking courses from two year and four year post-secondary institutions during the regular school year. Students may take up to one course per semester. A request for an exception to this requirement will be considered on a case-by-case basis and evaluated by a committee comprised of the high school principal, high school guidance director, superintendent of schools or his designee and other appropriate staff. The committee's decision cannot be appealed.

To be eligible for this option, students must meet the following criteria:

- 1. Meet the admissions standards for the post-secondary school;
- 2. Meet course pre-requisites;
- 3. Maintain at least a B average in his/her courses overall prior to applying;
- 4. For courses that will be used to complete graduation requirements, meet with guidance counselor and appropriate curriculum leader to draw up a plan that demonstrates the appropriateness of the course content and indicates how the course will meet graduation requirements;
- 5. Provide evidence of parent or guardian approval.

Credits for courses taken under this option will be determined as follows:

- 1. The course must meet for one semester or its equivalent;
- 2. The student must earn a passing grade in that course and must submit transcript to the guidance department;
- 3. Credits awarded may not exceed one SAHS credit for each three credit semester college course.

Attendance Policy: Attendance must satisfy the post-secondary instructor's requirements.

Financial Assistance:

- 1. The Maine Department of Education shall pay 50% of the in-state tuition for the first 3 credit hours taken each semester at an eligible institution and up to 6 credit hours per academic year. The eligible institution may not make any additional tuition charges for the course, but may impose fees and charges other than tuition that are ordinarily imposed on students.
- 2. All additional costs, including fees and charges, transportation, etc., will be borne by the student.

ALTERNATIVE EDUCATION

The Marti Stevens Learning Center (MSLC) provides alternative education programming to appropriately placed Skowhegan Area High School students. MSLC will provide an academic, social, and vocational experience with an emphasis on project-based learning. Students interested in attending MSLC should see their guidance counselor for more information.

ADMISSION OF RESIDENT STUDENTS

School Administrative District #54 shall admit as students those children of legal school age who live with parents or legal guardians residing within the municipalities of Canaan, Cornville, Mercer, Norridgewock, Smithfield and Skowhegan.

Adequate proof of residency will be required and verified.

Guardianship shall be substantiated by a copy of a court order appointing the resident as guardian of the student. If the appointment of guardianship has not been made when the student enters school, the appointment must be completed within 45 days. No student shall be accepted for enrollment on the basis of guardianship established by a power of attorney.

State wards shall be considered a resident of the district for purposes of school enrollment. Students who have attained the age of 18 or who are emancipated under Maine Statutes shall be considered residents of the district for school purposes.

Students whose parents have purchased housing within the district may begin the semester with permission of the Superintendent. Students whose parents are moving from the district may complete a semester with the permission of the Superintendent.

In the case where this policy presents an extreme hardship, the affected individuals may appeal to the Board of Directors for a waiver on a case-by-case basis submitting a written request for waiver to the Chairperson.

STUDENT WITHDRAWAL FROM SAHS

When a student is intending to withdraw or transfer from Skowhegan Area High School the following procedures will be followed:

1. Student and/or parent will notify guidance and meet with the appropriate counselor to acquire the withdrawal/transfer form.

2. Parent must sign a withdrawal/transfer form. If parent is not available for signature, the counselor will contact the parent for confirmation.

3. Student will obtain a clearance signature from the Media Center.

4. Student will see an administrator for a signature.

6. Student will return one copy of the withdrawal/transfer form to the guidance office and keep one copy to take to the receiving school.

7. If additional records are requested, the student may have copies of necessary information to take to the receiving school.

8. If health records are requested at the time of withdrawal, the student/parent will be referred to the school nurse.

9. Official school records will be sent to the receiving school when an official request is received from that school.

STUDENT RECORDS

Maine School Administrative District #54 adheres to all aspects of the Family Educational Rights and Privacy Act (FERPA). This Act affords parents and students over the age of 18 certain rights with respect to student educational records. To access the details of **FERPA** go to: http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html

SAMPLE PROGRAMS OF STUDY LEADING TO POST-SECONDARY ACCESS

Regardless of career pathway or post-secondary educational pathway, students should always engage in coursework that matches their abilities, challenges their intellectual limits and prepares them for their future to the greatest extent possible.

A typical year class load is between 6 and 7 credits leaving room for one or two study halls.

2 year college/trade school/ Apprenticeship	4 year college moderately selective: UMaine, Husson Thomas	4 year college highly selective Bowdoin, Colby, Ivy League Schools
Recommended Courses	Recommended Courses	Recommended Courses
to be taken at the most	to be taken at the most	to be taken at the most
rigorous level possible	rigorous level possible	rigorous level possible
(College Options and	(College, Honors, and AP	(Honors, and AP when
College when possible)	when possible)	possible)
4 English	4 English	4 English
4 Math (through Algebra II, Senior Tech Math, Senior College Algebra)	4 Math (through Algebra II minimum +Trig/Pre-Calc, Statistics, Senior College Algebra)	4 Math (through Trig/Pre- Calc or Calc +Statistics or Calc BC)
4 Science (Biology, Physics, Chemistry, Science elective)	4 Science (Biology, Physics, Chemistry and additional electives)	4 Science (Biology, Physics, Chemistry and additional electives)
4 Social Studies (Geography,	4 Social Studies (Geography,	4 Social Studies (Geography,
Electives, US History I,	Electives, US History I,	Electives, US History I,
Government)	Government)	Government)
SCTC Course(s) in field of	2-4 same World Language	4 same World Language
Interest	(French, German, Spanish)	(French, German, Spanish)
.5 Health	.5 Health	.5 Health
1 Physical Education	1 Physical Education	1 Physical Education
1 Fine Art	1 Fine Art	1 Fine Art
.5 Career & College Prep	.5 Career & College Prep	.5 Career & College Prep
.5 Financial Literacy	.5 Financial Literacy	.5 Financial Literacy
Additional Electives to	Additional Electives to	Additional Electives to
broaden learning experience	broaden learning experience	broaden learning experience
or enhance relevant skills	or enhance relevant skills	or enhance relevant skills

EARLY GRADUATION

A student who has completed their second year of high school may decide to complete their diploma requirements in three years. Skowhegan Area High School's philosophy is that a four-year high school experience, and the maturity gained in that time, best prepares a student for post-secondary success. Skowhegan Area High School also recognizes that for varying reasons, a student may choose to graduate in three years. An Early Graduation Application must be completed before classes begin junior year. See your Guidance Counselor if interested.

CANCELLATION OF COURSES

Courses may not be offered if they are under enrolled or if financial constraints cause reduction in programming.

HOME SCHOOL

Please consult the MSAD 54 home page and click the policy link under administration for information related to home school students. Detailed information about the Maine Department of Education steps to establish a home school program and home school student participation in MSAD 54 programming is listed. The policy files are IHBG and IHBGA.

APPLIED AND FINE ARTS DEPARTMENT

Applied Art

Advanced Metals (.5 credit)

This metals unit is intended to give the student a general knowledge and understanding of major concepts significant to the metal working industry. Through an exposure to casting, forging/heat treatment, and welding the student will acquire various metal working processes common to the industry. Hands-on experience will be achieved by the student manufacturing products involving the operations mentioned above. Written assignments will also be required throughout the course to supplement the practical application. (Prerequisite: Metals I)

Advanced Woods (.5 credit)

The purpose of Advanced Woods is to give the student the opportunity to develop new skills and expand learning experiences gained in Woods I. This course is a more in-depth study in the area of woodworking. The emphasis is on the construction of student projects. (Prerequisite: Woods I)

JMG (1 credit)

JMG is a full year class with focus on career development, job attainment and job survival. Skill development in the areas of leadership, team building, communication, time management, and financial literacy will be focuses of the course. These skills will be developed through community service learning experiences. Enrollment will be determined by recommendation, application and an interview. Grades 9-12

JMG II (1 credit)

JMG II is a credited class meeting over the course of the school year (2 semesters) that will assist students in graduating from high school and preparing them for the world of work. This is a competency-based curriculum in which students will learn basic skills, career development, job attainment, and retention. Students will learn how to write powerful resumes and cover letters to better their chances of getting a job. Aside from in-class tasks, students will be asked to actively participate in community service, focus on college searches, recommendation profile, student profile, essay writing, FAFSA, college applications, interviewing, financial aid, scholarship searches and college campus visits. After graduation, a Job Specialist will follow-up on the JMG Seniors for 12 months to make sure they all achieve a positive outcome (full-time job, technical school, college, part-time job, etc.). Students must be willing and able to participate in every phase of the program. Enrollment will be determined by recommendation, application and an interview. Grades 11 and 12

Metals I (.5 credit)

Metals I is designed to provide the student with exploratory and/or introductory experiences in sheet metal fabrication and wrought iron. In the area of sheet metal fabrication, major emphasis will be placed on the design, planning, and production of techniques common to the sheet metal industry. The objectives of the course will be achieved through hands-on experiences, the manufacture of various projects and written assignments.

Power and Energy (.5 credit)

This course will allow and offer students to learn about many examples of energy and power. Topics will include Electricity, Electronics, Solar Power, Wind and Wind Blade Design, Small Engines and Fuel Cell Design. This allows for student driven interest to be their own steward as to topics that they will explore.

Tech Drawing (.5 credit)

Learn the basic skills, tools and techniques required to accurately draw how something functions, is constructed or designed. Tech drawing is an essential for individuals who might work in engineering, manufacturing, construction or other settings where accurate and detailed visual representations of design are essential. Tis will be a semester offering open to students who will be in grades 10-12.

Woods I (.5 credit)

The purpose of Woods I is to give the student a basic understanding of woodworking. In this course the student will develop basic skills in the use of tools, materials, and processes as they relate to woodworking.

Family and Consumer Science

Early Child Development (.5 credit) (Grades 10, 11 & 12)

The course explores the physical, social, emotional and intellectual development of the child. Students will explore the necessary skills to create a nurturing environment inside and outside the home. The course will include the study of child development through the age of 12. There will be a variety of hands -on projects as well as traditional coursework required.

Family and Consumer Sciences 1A (.5 credit) Basic Sewing

This is an introductory course in concepts related to fibers, fabrics, fashion, color, clothing selection, and clothing care. Student will apply construction skills and design skills to projects. Basic and practical sewing skills will be used to construct a wide variety of projects. Pillows! Frogs! Therapeutic Rice Packs! Traditional course work is also required.

Family and Consumer Sciences 1B (.5 credit) Basic Foods

This is an introductory course in basic food preparation skills. Units may include food safety, kitchen safety, equipment terminology, reading food labels, nutritional needs, and consumerism and foods. Students will learn to plan and prepare a wide variety of foods. All lab experiences will incorporate kitchen safety, food sanitation, and proper use of equipment, food presentation, and kitchen cleanliness! Traditional course work is also required.

Foreign Foods/ Cultural Cuisine (.5 credits)

The major goal of this course is to explore and research foods and traditions from around the world! American cultures, regional and local cultures will also be included. Be prepared to try some of the same foods you usually eat but with different spices or different cooking methods! Traditional course work and basic food preparation labs are required.

Interior Design (.5 credits) Counts as a Fine Arts Credit

Students will explore exterior and interior basic design principles and design elements. Students will examine the relationship between human needs and the influence these needs have on housing choices. Housing history, architectural styles, and floor plans, decorating schemes will be researched. Individual projects applying knowledge of the above concepts will be required. Traditional course work is also required.

Nutrition (.5 credit)

Eat smart! The traditional basic food groups used at this time will be reviewed. Eating disorders, fad diets, weight control, and how technology has influenced food habits will be examined. The course is designed to help students become more thoughtful consumers by researching the influence of media on food choices. Nutrition throughout the life span will be explored. Traditional course work and basic food preparation labs are part of the course.

Parenting (.5 credit) (Grades 10, 11 & 12)

The roles and responsibilities of caregivers/parents will be examined. Students will become aware of the complex changes caregiving and parenting have on individuals and relationships. The course is designed to help develop parenting skills. The course will include the study of development from infants to age one. Traditional course work is required.

Upcycled Arts (.5 credit) Counts as a Fine Arts credit

Reduce! Reuse! Recycle! Upcycle! Refuse! Recover! Repair! Repurpose! Using project-based activities, while applying the elements of art and principles of design, students will explore traditional art, as well as create new art with modern materials. Traditional course work will also be incorporated.

Fine Arts

Advanced Art (.5 credit)

This course is a survey of art history and studio work and is for the serious art student. Social dynamics and art theory will be explored and will be integrated with a study of style and technique in studio work. This course will include both independent and group work. (Prerequisite: 1 credit of fine art)

Digital Photography (.5 credit)

This course is an exploration of digital photography and digital image-editing using Adobe Photoshop. During the semester you will work toward the following goals: gain an understanding of digital photography, processes and concepts, learn to apply the Elements and Principles of Design to create interesting and strong compositions, apply these new understandings toward creating original, strong, interesting digital images, and expand your knowledge and vocabulary as it relates to digital imagery and photo manipulation and enhancement.

Foundations of Art (1 credit)

Foundations of Art covers the basic knowledge and skills necessary for the development and appreciation of the visual arts. Students learn the fundamentals of drawing, painting, printmaking, crafts, and art history. This is primarily a studio class and student will keep a sketchbook and a portfolio.

Personal Directions in Visual Art (1 credit)

This is a class for students that are passionate about the Visual Arts as a lifelong learning experience or as a student that wants to prepare a Portfolio for post-secondary education in the Visual Arts. Students will study any aspect of the Visual Arts that they wish, while identifying their own Standards and Performance Indicators from the Maine Learning Results. They will keep a journal furthering their creative thinking skills and a notebook documenting their individual studies. They will also keep a sketchbook each quarter with a minimum of ten studies per quarter. They will complete a creative problem solving challenge quarterly as determined by the instructor with student input. Each student will be working individually and collaboratively. At least one project must be completed each quarter. Students will learn how to participate in the critique of their quarterly work. Students may have to purchase some materials on their own. (Prerequisite: Foundations of Art or instructor permission)

Portfolio Preparation (.5 credit)

This is a course designed for the serious art student who is considering art as a college major. Students will prepare a portfolio of artwork using computer technology and digital equipment. No computer technology experience is necessary to participate

in this class. Students will expand their art knowledge through an in-depth study of an artist or an art movement that is of interest to the student.

Printmaking (.5 credit)

This course will involve students in the art and history of printmaking from Japanese prints to the present-day screen printing. Included in this course will be activities such as: relief prints, silk screening, linoleum and woodblock printing.

3-D Design (.5 credit)

Students will explore 3-Dimensional Design in a variety of media. We'll document our projects in a digital portfolio. If you like making things this is the course for you.

BUSINESS CAREER TECHNOLOGY DEPARTMENT

Accounting (1 credit) (3 potential Thomas College credits) (Grades 11 & 12)

Are you interested in one of the most dynamic and fastest growing professions in the business world? Accounting is the "Language of Business." Are you interested in a profession that can channel you into countless career options? Do you like working with figures and learning how to manage, invest, and make financial decisions that will help to make a profit for the company that employs you? Do you wish to pursue a career that will pay you a good salary and provide excellent benefits? Then the field of accounting should interest you. This is an accelerated course that is designed to provide the college preparatory student with a sound foundation for accounting in college. In this class, you will learn accounting and spreadsheet software to prepare financial documents for sole proprietorships, partnerships, and corporations. Everyone who is aspiring to a position with responsibility in business should have a basic knowledge of the fundamentals of accounting. This course is highly recommended for all students considering business administration, economics, computer science, accounting and finance careers. A student must earn a C or better to earn Thomas College credit.

Career and College Prep (.5 credit) - Graduation Requirement (Grade 11)

This course is all about YOU! It is designed to assist students in successfully establishing and achieving education, career and life goals. Using a variety of techniques and assessments, students will discover what they value, what skills they have, what their interest are, and how to match these attributes to a career. Students will select and research several careers of interest and explore colleges through websites, video presentations, and speakers. Students will practice filling out college applications, job applications, creating an effective resume, effective interviewing skills, financial aid and scholarship research will also be included. Students will develop a personal employment/career portfolio. Various technology programs will be used to enhance the learning of career research/planning.

Computer Applications (.5 SAHS credit) (3 potential Thomas College credits)

This course introduces the student to a suite of software tools critical to academic and workplace success (word processing, spreadsheets, E-mail, Internet tools, presentation graphics, and databases). Students could possibly become Microsoft Office Specialist (MOS) certified.

Computer Art I (Digital Media) (.5 credit)

Digital Media is a course designed to educate students on the ever-changing digital world, as well as to provide hands-on experience with Photoshop CS4 and Affinity Designer, industry standard software. The curriculum covers a wide range of areas, so it appeals to a diverse group of students. Students learn the basics of creating digital media through guided instruction and projects. Topics covered include: definition of digital media, overview of digital media technologies, digital media production, Introduction to Photoshop and Affinity Designer, Design Principles and opportunities for careers using digital media.

Computer Art II (Digital Media II) (.5 credit)

This is a course intended to further your knowledge of Digital Media with hands-on projects and activities in a portfolio-based classroom environment. It explores more advanced Photoshop concepts and design techniques. (Pre-requisite: Computer Art I).

Financial Literacy (.5 credit) - Graduation Requirement (Grade 12)

Do you want to make money and have money when you need it? This course is a necessity for life! You will learn life-long skills to prepare you for financial success, security, and know-how. How do I balance a checkbook? What is credit? How do I stay out of debt? How do credit cards work? What is a credit report? What are my rights and responsibilities? How do I avoid bankruptcy? How can I save if I don't have any money? What is a budget? How do I set financial goals? These questions and many more will be answered in this course. This course prepares you to manage your savings, checking, credit, insurance, budgets, taxes, and other personal financial issues you must know in order to make it on your own in the real world. This course will prepare you for "life after high school." technology.

Introduction to Sports Management (.5 credit)

Like to be down in front—courtside, ringside, or on the sidelines at the 50-yard line? If you're not game to be a player, mascot, or coach, you can still catch all the action up close and personal as manager of the team. Sports management lets you participate in—and cash in on—the exciting world of sports from a business standpoint. In this course, you'll learn about sports themselves (perhaps focusing on one or two in particular) plus the psychological principles at work behind them and how sports fit into our society. But you'll also gain a strong foundation of knowledge in the field of business, examining how the worlds of business and sports interact and how you can make those interactions more profitable and beneficial for every person and interest involved.

Multi Media/Web Page Design (.5 credit)

Are you interested in creating your own app, game or web site? This course is for YOU! This course takes a wide lens on computer science by covering topics such as programming, physical computing, HTML/CSS, and data. Students engage with computer science as a medium for creativity, communication, problem solving, and fun. The course inspires students as they build their own websites, apps, games, and physical computing devices.

Multi Media II (.5 credit)

Multi Media/Web Page Design II builds on the content knowledge from the previous course. This course introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. It includes a deeper focus on concepts such as how the internet works and the societal impacts of computer science.

Principles of Marketing (.5 SAHS credit/3 potential Thomas College credits) (Grades 11 & 12)

Are you looking for a creative, dynamic, and exciting course/career, then marketing is for you! Marketing is more than advertising and sales. It is any and all of the activities that influence the flow of goods, services, and ideas between producers and consumers or organizations. This course provides students with an introduction to the role of marketing, advertising and the process involved in developing a marketing mix for a new product. Topics covered include marketing functions, product development, channels of distribution, market segmentation, pricing policies, product life cycle, and promotional activities. Students will complete a project developing a product that incorporates the marketing mix. Emphasis will be on the elements of promotion (selling, public relations, publicity, advertising, and sales promotion) and how it contributes to the success of a business. This course may be taught in person, online, or in a hybrid format.

Sports History (.5 SAHS credit) (3 potential Thomas College credits)

This course is designed to deepen the students' knowledge of the history of sports and to help them realize the physical culture of mankind, which has had a significance in history. This course will give students the background necessary to make decisions in the sports arena and to be successful in the field of sports management.

Start Your Own Business (.5 credit)

Do you want to be your own boss? Own your own business, and be a successful entrepreneur in your community? Whether you plan to operate a business of your own or become an employee who expects to rise to a top-level position, you must be well informed about the production, marketing, and financial activities of a business. This course is devoted to the management and development of a small business by creating your own personal business plan. From the development of your personal business plan, you will benefit by learning how successful businesses operate.

Street Law (.5 credit)

Have you ever wondered how the law affects you? This course is for YOU! The purpose of Street Law is to help students learn about their rights and responsibilities and to encourage them to think critically about the law. The course explores how law affects students' lives and ways that law can be used to improve society. We will touch on broad and specific legal topics to give students a better understanding of law and how it affects you in **real life.** We will use case studies, individual research, group discussion, and guest speakers.

ENGLISH DEPARTMENT

Advanced Placement English IV (1 credit)

This fast-paced rigorous course is taught at the level of a freshman course in college. It involves analysis of world literature, formal expository writing, and research projects. All students who enroll must take the AP test which is administered in May. Assigned summer readings are required and minimum performance standards are set by school board policy. (Prerequisites: Honors I, II, and III. Any student who has not met the prerequisites must apply for enrollment and be approved by the English department.)

Advanced Speech (.5 credit) counts as a Fine Arts credit

Students will learn to use the voice as an instrument for creation Emphasis will be on vocal range, the breath, intonation, modulation, and performance. Student will use the voice to create characterization and narration and will create products such as advertisements, voice overs, and announcements. Technology will be incorporated. (Prerequisite: Successful completion of Speech.)

Advanced Theatre (.5 credit) counts as a Fine Arts credit

Students will study elements of theatre in-depth with a focus on performance, creation, and critique and application. Topics will include scene study, character developing, acting, movement, and vice techniques; and design. (Prerequisite: Successful completion of Theater.)

College Composition (.5 SAHS credit/3 potential KVCC credits) (Grades 11 & 12)

College Composition is an introductory level college writing course that emphasizes critical reading and thinking as part of the process of clear and effective writing. Students will practice and apply a range of writing skills through varied and numerous writing assignments. Students will conduct research and write two different kinds of essays based on that research. College Composition values the process of writing and students will actively engage in the revision process, which will include self-reflection, peer review, and conferences with the instructor. A student must earn a C or better to earn KVCC credit.

College English III (1 credit)

In this college preparatory, third year course, students will read a survey of 20_{th} century American literature. Students will write essays related to literature, they will continue to prepare for the SAT by writing timed essays, and they will practice writing college application essays. Students will learn formal research skills that include proper documentation of sources. Grammar instruction will focus on more complex constructions.

College English IV (1 credit)

This course provides a survey of English literature with an emphasis on modern works. Writing, involving exposition and some literary analysis, and grammar study are part of this course. Formal research skills are taught and applied in projects.

College Options English III (1 credit)

In this third-year course, students will read American literature from the 20_{th} century. Students will continue to develop their essay writing skills as well as prepare for the SAT and practice application essays. Students will work on developing sound reading comprehension skills and learn to research effectively.

College Options English IV (1 credit)

In this fourth course, students will read a variety of fiction and nonfiction texts including novels, memoirs and articles. Students will continue work on reading comprehension and interpretation as well as formal essay writing and research skills.

Consultant English I (1 credit)

In this course students will build on basic grammar, spelling, capitalization, and punctuation skills. Grammar study will continue with instruction around recognizing and fixing fragment and run-on sentences. Students will also be introduced to a variety of sentence structures. Students will develop these grammar skills along with other writing skills through extensive practice, beginning with the paragraph through the complete essay. Students will develop their reading comprehension and analytical skills as they engage with short stories, plays, fiction, and nonfiction. Students will be accommodated based on IEP recommendations. This course is taught in coordination with the Special Education department.

Consultant English II (1 credit)

This course is a continuation of Consultant English I. Admission into the class is based upon departmental recommendation and/or IEP placement.

Consultant English III (1 credit)

In Consultant English III, students study the following themes: aspirations, racism and discrimination, taking a stand, and dealing with disabilities. Students will read a variety of works—novels, short stories, plays, poems and essays—that relate to these broad themes, including *Journey*, *A Raisin in the Sun*, *Animal Farm*, and *The Miracle Worker*. In addition, students will study vocabulary and grammar throughout the academic year, as well as practice and expand writing skills. Students are supported in class by two educators. Therefore, admission is based on departmental recommendation and/or IEP placement.

Consultant English IV (1 credit)

This course is a continuation of Consultant English III. Admission into the class is based upon departmental recommendation and/or IEP placement.

English I (1 credit)

In this course students will build on basic grammar, spelling, capitalization, and punctuation skills. Grammar study will continue with instruction around recognizing and fixing fragment and run-on sentences. Students will also be introduced to a variety of sentence structures. Students will develop these grammar skills along with other writing skills through extensive practice, beginning with the paragraph through the complete essay. Students will develop their reading comprehension and analytical skills as they engage with short stories, plays, fiction, and nonfiction. This course will offer college preparatory assignments.

English II (1 credit)

This course is designed to assist students in developing reading and writing skills. Through a variety of novels, short stories and poetry, students will study literary analysis and practice active reading strategies. *Of Mice and Men, To Kill a Mockingbird, Julius Caesar* or *Macbeth,* and *Lord of the Flies* are some of the works studied extensively. Students will develop essay writing skills and practice on demand writing prompts in preparation for the SAT. The basics of grammar, with particular focus on comma rules, are reviewed in the development of effective sentences and paragraphs.

Environmentalism: Philosophy, Ethics, and History (.5 SAHS credit/3 potential Thomas College credits) (Grades 11 & 12)

This examines how our senses of being a part of (rather than apart from) our environment and of our responsibility to the environment have arisen, in part by studying the history of the environmental movement. It emphasizes that the "Green Ethic" is only in part a matter of ethics; it is also a matter of humanity's self-preservation.

After completing this course, students will be able to: 1. Explain why humans cannot be considered to be independent of the natural world 2. Explain why the environment matters to individuals, businesses, and society 3. Describe the philosophical roots of environmental problems 4. Outline the history of the environmental movement 5. Describe main threads in environmentalist thinking 6. Explain how understanding the past may help humanity solve present problems.

Honors English I (1 credit)

Students who are recommended by their eighth grade Language Arts teacher as capable of work at an accelerated level may enroll in this first course in the honors program. Major works of literature in this class may include *The Odyssey, Romeo and Juliet, The Book Thief, Night* and *A Tale of Two Cities*. The development of strong writing skills is important, and students will review formal grammar in relationship to their writing. Intensive vocabulary study is integrated throughout the year. Students will also learn basic research skills that they will apply in written reports, as well as presentations. Students enrolled in this class must complete assigned summer readings and must maintain minimum grade standards established by school board policy.

Honors English II (1 credit)

This is the second course in the Honors English program. Themes explored in literature will be man in isolation, man's conflicts with himself, and the sins of society. *To Kill a Mockingbird, My Antonia, Julius Caesar, and Lord of the Flies* are some works studied extensively. Poetry and short story selections will be read. The basics of grammar, with particular focus on comma rules, are reviewed in the development of effective sentences and paragraphs. Composition related to reading includes an introduction to the written analysis of literature in formal essays. Class requirements include assigned summer readings. Students must maintain grades based on school board policy. Students new to the Honors program must apply to the department for approval before registering for this course.

Honors English III (1 credit)

This course is taken in the third year of the honors sequence. A survey of American literature is studied, including the works of Hawthorne, Twain and Fitzgerald. Shakespeare is studied as well. Writing related to literature is emphasized and formal research skills are taught. Short stories, poems and nonfiction are also analyzed. Grammar and sentence structure are reviewed when necessary and vocabulary development continues. Assigned summer readings are required and grade standards are set by school board policy. (Prerequisites: Honors I and II or application to the department for special approval before registering for this course.)

Introduction to Literature is an introductory level humanities course in which students will read and discuss a selection of short stories, plays, poems, and novels. Students will write about their personal reactions as well as engage in literary analysis in a variety of writing assignments that may range from journal writing, in class prompts, essays, and creative pieces. This class provides students with the opportunity for personal growth and insight into social problems as revealed through literature. (Prerequisite: A grade of C or better in College Composition)

Journalism (.5 SAHS credit/3 potential Thomas College credits) (Grades 11 & 12)

This course surveys the broad and dynamic field of journalism, from traditional news reports to print and web feature stories to the hybrid forms of blogs and tweets. Topics include the principles of traditional news reporting, design and production of both print- and web-based periodicals, and how new communication technologies are changing how we perceive, receive, and evaluate "news." Through class discussions and workshops, students discover the techniques used in various genres (news, features, reviews, editorials, advertising), and then develop copy in several of these genres as part of their final portfolio of work in the course. The course work includes a research project in which the class performs a competitive analysis of local print and digital news media and evaluates how well these companies are adapting to the challenges of the new journalism.

Play Writing (.5 credit) counts as a Fine Arts credit

This is a one-semester course in writing specifically for the stage. Students will learn the skills and vocabulary needed to write effective plays. Students will be required to write and revise daily, both in and out of class. Students will give and receive peer feedback, and they will workshop their writing. Each student will complete a fully realized, original dramatic work.

Speech (.5 credit) (3 potential Thomas College credits) counts as a Fine Arts credit

In this course, students learn to research, prepare, and present speeches in the first quarter. Oral interpretation, including the study of children's literature, poetry, monologues, and readers' theatre, will be emphasized in the second quarter. Learning is assessed through student in-class performance and reflection. Speech is open to all students, but only grades 11 and 12, per Thomas College, may earn college credit. If Speech is taken during grades 9 or 10, it may be taken again during grades 11 or 12 so students may access college credit opportunity. A student must earn a C or better to earn Thomas College credit.

The Art and Craft of Poetry (.5 SAHS credit/3 potential Thomas College credits) Grades 11 & 12)

In this course, students read and write poetry, developing their abilities to analyze and create through reading, practice, discussion, and workshops. This course is focused on exposing students to both canonical and contemporary poetry. In addition to reading a variety of poetry centered around essential questions, students will write their own poems using published poetry as models. Students will also develop a multimedia poetry project and by the end of the course, create a portfolio of work that includes a collection of favorite poems, analysis of poetry, and original poetry.

Theatre (.5 credit) counts as a Fine Arts credit

All aspects of the theatre are explored: acting, makeup, costumes, set construction, theatre history and for advanced students – directing. Students will be involved in practical, hands-on projects directly related to play production.

MATHEMATICS DEPARTMENT

AP Calculus (1.5 credits)

This course is a rigorous extension of calculus. Students will be required to take the AP exam. (Prerequisites: Honors Trigonometry and Pre-Calculus or by approval of the department)

Algebra I is an introduction to algebra rules and topics including linear functions, quadratic functions, solving equations, inequalities, and systems. Semester one will focus on basic concepts of numbers, variable, and patterns, order of operations, the structure of the number system, and solving real world problems are emphasized. Semester two is an introduction to rules and topics include linear functions, quadratic functions, solving equations, inequalities, and systems.

Algebra II (1 credit)

This course is a continuation of Algebra I. Students will explore different functions and the application of these functions in real-world settings. (Prerequisite: Successful completion of Algebra I and Geometry)

Algebra I, Part I (1 credit)

Algebra I, Part I is an introduction to Algebra rules and topics including linear functions and solving equations. Year one will review on Pre-Algebra skills including operations with integers, fractions, decimals, percentages, simplify expressions, evaluating expressions, and plotting points. From here the class will focus on the first four units of Algebra I: Solving Equations, Solving Inequalities, Functions & Scatter Plots, and Equations of Lines.

Algebra I, Part II (1 credit)

Algebra I, Part II is an introduction to rules and topics including linear functions, quadratic functions, solving equations, solving inequalities, and solving systems of equations and inequalities with a focus on real life applications of algebra.

Calculus (1 credit/3 potential USM credits)

This course covers the fundamentals of differential and integral calculus. It is intended to develop manipulative skills by provided a sound intuition about the concepts. Applications, rather than theoretical structure will be stresses. A project will be required. (Prerequisite: Trigonometry and Pre-Calculus) A student must earn a C or better to earn USM credit.

Daily Algebra (.5 elective credit) (Pass/Fail)

Daily Algebra is for any student who is enrolled in Algebra I who may need extra time/instruction to be successful. The class is run by a math teacher with the hope of better meeting the needs of the students who find learning algebra concepts challenging. This is an elective class and does not fulfill a diploma requirement for math.

Daily Math (.5 elective credit) (Pass/Fail)

Daily Math is for any student who is enrolled in Geometry or Algebra II who may need extra time/instruction to be successful. The class is run by a math teacher with the hope of better meeting the needs of students who find learning geometry and algebra concepts challenging. This is an elective class and does not fulfill a diploma requirement for math.

Foundations of Algebra (1 credit)

Foundations of Algebra is a remedial math class for students who have not mastered the skills necessary to be successful in Algebra I. The students will work with integers, decimals and fractions to acquire skills needed for Algebra I. The class is instruction-based with remedial work done on the computer.

Geometry (1 credit)

Geometry is all about shapes and their properties. In this course you will cover topics including lines, triangles, quadrilaterals, polygons, circles, and the basics of coordinate geometry. Students will also calculate the perimeter, area, surface area, and volume of shapes and figures. Geometry relies heavily on the skills taught in Algebra I to explore these concepts. Several projects including tessellations, polyhedrons, product packaging, and writing assignments are required. (Prerequisite: Algebra I)

Geometry Foundations (1 credit)

Geometry is the study of the size, shape, position and dimensions of figures and solids. In this class, students will learn about shapes, area, surface area, volume, congruence, constructions and transformations. This class will explore these topics with limited emphasis on Algebra 1 skills and focus on real-life applications of geometry. (Prerequisite: Algebra I, Part II or Algebra I and/or teacher recommendation)

Honors Algebra I (1 credit)

This course is the same as Algebra I but is more demanding.

Honors Algebra II (1 credit)

This course is the same as Algebra II, but with more depth. (Prerequisite: Successful completion of Algebra I and Honors Geometry or approval of the department)

Honors Geometry (1 credit)

This course is the same as Geometry, but is more demanding. (Prerequisite: Honors Algebra I or approval of the department)

Honors Trigonometry and Pre-Calculus (1 credit)

This course is the same as Trigonometry and Pre-Calculus but with more depth. Projects are required. (Prerequisite: Successful completion of Honors Algebra II or approval of the department)

Quantitative Reasoning (MAT 111) - Fall semester (.5 credit/3 potential KVCC credits)

This course will be a concurrent course with KVCC.

Quantitative Reasoning provides a foundation in critical thinking, problem solving, and mathematical skills aligned with citizenship, workforce and real-world applications. The goals of the course are to engage students in meaningful mathematical experiences that will increase their quantitative and logical reasoning abilities and strengthen the mathematical abilities that they will encounter in other disciplines. Developing and supporting communication and collaboration skills when doing mathematics will be a focus of the course. Learners will engage in a variety of activities designed to aid in the mastery of the material. These will include but are not limited to: group work, individual work, use of a scientific calculator, work with spreadsheets, exposure to organizational and study techniques. Topics will include, but not limited to: numeracy, proportions, linear and exponential models, geometry, statistical analysis, and budgeting.

Senior College Algebra (1 credit/3 potential KVCC credits)

The course is designed for students who have completed high school math requirements but are not ready to take Trigonometry. The first semester is designed as a comprehensive review math for students transitioning to college after high school. The second semester students would be enrolled in a KVCC MAT 117 College Algebra course. The emphasis of this course is on problem solving. This course unifies the traditional analytical methods of Algebra with the modern graphing technologies in order to solve problems modeled by a variety of functions such a linear, quadratic, absolute value, polynomial, exponential and logarithmic. The central theme is authentic applications from traditional disciplines such as the physical sciences and engineering, as well as applications from business, economics, social sciences, life science, health science, sports and other areas of student interests. This course is appropriate for students whose future studies of mathematics include applications-based courses such as Statistics or Math for Business and Economics. A student must earn a C or better to earn KVCC credit. (Prerequisite: Successful completion of Algebra I, Geometry and Algebra II)

Senior Technical Math (MAT 114) - Spring semester (.5 credit/3 potential KVCC credits)

This course will be a concurrent course with KVCC.

It is recommended that you take MAT 111 in the fall before taking this course.

This course focuses on mathematics topics relevant to a variety of trades and technical disciplines. Topics will include, but not limited to: proportions, percentages, measurement, algebra, geometry, and trigonometry. An emphasis is placed on practical, contextual applications. Students will work with selected math topics to enhance their understanding and ability to manipulate mathematical problems. The students will be presented with a wide range of illustrated math examples dealing with real life applications.

Statistics and Probability (1 credit)

This course covers probability topics of simple events. It also covers statistics through some of the validity tests such as Chi Square. The course is offered to any student who has had an Algebra II course or is concurrently enrolled in Honors Algebra II.

Trigonometry and Pre-Calculus (1 credit)

This course reviews Algebra II stressing the graphic approach to the solution of problems. In addition the course covers the following topics: exponential and logarithmic functions and trigonomic applications. (Prerequisite: Successful completion of Algebra II)

MUSIC DEPARTMENT

Advanced Music Performance (1 credit)

This course is designed to enhance performance skills. Students are required to audition for District Festivals, All-State, and other various performing festivals throughout the year as well as performing in class on a daily basis. Students will be expected to critique and discuss one another's performances as well as their own. Topics include preparation for college-level auditions, college research, extensive scholarship exploration, broad-based study of musical styles and performance techniques; i.e.: Classical, Pop, Broadway, Jazz and other various genres and participating in both group and solo performances. Skills needed: Extensive prior performing experience in vocal or instrumental music. Prerequisites: **By music teacher recommendation only.** Students must be enrolled in band, string orchestra or chorus.

Band (1 credit)

Band is a performing ensemble provided opportunities for students with pervious band instrument experience to expand their skills on their instrument and play music of many varied genres. Performances include seasonal concerts, sporting events, school assemblies, tours and parades. Periodic proficiency evaluations are given to assess individual progress. Members earn academic credit for successful completion of the requirements. Students are encouraged to pursue further experiences with Solo & Ensemble Festivals, Jazz Festivals, Mid-Maine Youth Orchestra and Kennebec Valley and All-State Music Festivals.

Chamber Choir (1 credit)

Admission by permission/audition. Perform advanced music from choral literature. Focus on music literacy, sight singing and performance. (Prerequisite: Chorus)

Chorus (1 credit)

Chorus is a performing ensemble providing opportunities for students who desire a choral ensemble experience to improve and expand their vocal skills by performing music of many varied genres. Performances include seasonal concerts, exchange concerts, sporting events, school assemblies, tours and parades. Periodic proficiency evaluations are given to assess individual progress. Members earn .5 academic credit for successful completion of the requirements. Students are encouraged to pursue further experiences with Jazz Festivals, Kennebec Valley and All-State Music Festivals. Previous experience or permission of the director required.

Guitar/Music Theory (.5 credit)

The course will cover the reading of music through guitar. This course will focus on the basics of learning to play acoustic and/or electric guitar. Students will learn how to play basic classical songs and simple accompaniment/chords on the guitar. Some music theory, note reading and tab reading will be learned. **Please note: this class is for the beginning guitar student only. Students need to provide their own guitars.** Performances will be left to the discretion of the teacher and students.

Music Appreciation Technology (.5 credit)

This course will focus on the roots of Rock 'n' Roll and trace its beginnings from the 1950's to present day. We will study major icons of rock such as Elvis, the Beatles, Lynyrd Skynyrd, the Eagles, Bruce Springsteen, Madonna, as well as others. We will also explore the different genres of rock music such as Punk, Alternative, R & B, Heavy Metal, Disco, Eighties Rock and more. Students will be expected to keep a notebook throughout the semester, to write research reports as well as regularly attend class and complete homework assignments. Each unit of study will include a project involving the use of our available computer technology. Among the technological resources utilized are Key Note, GarageBand, Musescore, iTunes and iMovie.

String Ensemble (1 credit)

Strings/Orchestra is a performing ensemble that provides opportunity for students with previous orchestra instrument experience to expand their skills on their instrument and play music of many varied genres. Performances include seasonal concerts, assemblies and tours. Periodic proficiency evaluations are given to assess student progress. Members can earn .5 academic credit for successful completion of requirements. Students are encouraged to pursue further experiences by participating in string opportunities outside of the school day.

PHYSICAL EDUCATION AND HEALTH DEPARTMENT

Health (.5 credit)

One semester of health education is required to meet graduation requirements. It is strongly recommended that the course be taken during the ninth grade year. Health knowledge and skills enhance students' ability to achieve life goals and to develop them emotionally, mentally, physically and socially. There are 10 content areas for comprehensive school health education that may be addressed in class. The ten areas include: Community Health, Consumer Health, Environmental Health, Family Life Education, Growth and Development, Nutritional Health, Substance Use and Abuse, Safety and Accident Prevention, Prevention and Control of Disease and Disorders, and Personal Health—including Mental and Emotional Health.

Physical Education (.5 credit)

Two semesters of physical education are required to meet graduation requirements. Physical Education I (fall semester) and Physical Education II (spring semester). Appropriate clothing and sneakers are required to be worn by all students. If a student is not prepared for class, he/she will not receive credit for that day. Each activity includes working on skills, knowledge of the activity and general play. Individual, dual and team sports in conjunction with lifetime activities are offered.

Semester 1 Ultimate Frisbee/Disc Golf Golf Mountain Biking Geocaching Basketball/Aerobics Dance/Fitness Activities Volleyball Bowling Semester 2 Badminton/Ping Pong/Weight Room Activities Snowshoeing Archery Golf Lacrosse Softball/Track Bowling

Adaptive Physical Education (1 credit) (Pass/Fail)

This is a modified physical education program that includes activities that work on physical skills, knowledge of activities, and general play in both individual and team activities. Students must be recommended through the IEP process or by the instructor.

SCIENCE DEPARTMENT

Anatomy and Physiology (1 credit/3 potential Thomas College credits) (Grades 11 & 12)

This course is an in-depth study of the structure and function of the human body. In addition to body systems in overview, the parts of the body are considered on the molecular, cellular, tissue, and organ level. Laboratory experience is an integral part of this course. It is designed for the serious science student who plans to pursue a career in medicine, nursing, medical or lab technology, biology, zoology, pharmacy, physical education or physical therapy. Successful completion of Biology I and Chemistry I is required for admission to this course. A student must earn a C or better to earn Thomas College credit.

Animal Behavior (1 credit)

Are you intrigues by what animals do and why they do it This introductory course unveils complex and exciting relationships that occur in nature, highlighting the evolutionary causes behind these behaviors. Topics covered include: communication, competition, social and family groups, seasonal adaptation, biological rhythms, and predator-prey relationships. Examples will be drawn from across the animal kingdom as well as from our own backyard.

Biochemistry (.5 credit)

An advance elective supplemental chemistry course designed for students interested in pursuing a college course of study in science, particularly the medical field and some engineering concentrations. The course will focus on the study of the structure of molecules, macromolecules essential to the body, and processes that allow for life and inheritance. (Prerequisite: Chemistry Level I)

Biology Level I (1 credit)

Bio I is an introductory course designed to explore life on earth at the molecular, cellular and organism level. The course uses discussion, group work, laboratory investigations and projects to provide students a means of developing critical thinking skills and knowledge of fundamental biological concepts. Topics will include: Ecological Relationships, Cell Form and Function, DNA and Genetic Variation and Biodiversity through Evolution.

Biology Level II-Diversity of Life (1 credit)

An elective course will focus on biological diversity of the 6 kingdoms of life. Topics will include differentiating kingdoms based on cellular structure, energy production, consumption, reproduction, evolution and genetics. (Prerequisite: Biology Level I)

Biology Level II-Human Biology (1 credit)

This course is designed to learn about some of the body systems and how they interact to maintain homeostasis in a human being. This is a general course and not meant to replace clinical or technical courses in the health careers field. Students will investigate the function and structure of the nervous, endocrine, immune and reproductive systems and how they are related to

one another. In addition, health-related issues or conditions will be explored. The course uses discussion, group work, laboratory investigations and projects to provide students a means of developing critical thinking skills and knowledge of fundamental biological concepts in human biology and related careers. (Prerequisite: Biology Level I)

Chemical Kinetics (.5 credit)

An advanced elective supplemental chemistry course designed for students interested in pursuing a college course of study in engineering, the medical field and/or science. The course will focus on the study of chemical reactions including: stoichiometry, reaction rates, and chemical equilibrium. (Prerequisite: Chemistry Leve I and Algebra II)

Chemistry Level I (1 credit)

Chem I is an introductory course designed to meet specific standards based on the National Science Standards as well as the Maine Learning Results. The course outcomes will be based on the important chemistry concepts all American citizens should understand, focusing specifically on topics related to matter and energy.

Consultant Biology Level I (1 credit)

Bio I is an introductory course designed to explore life on earth at the molecular, cellular and organism level with coursework adapted to meet the needs of individual students. The course uses a variety of instructional strategies to provide students the skills needed to understand basic biological concepts. Topics will include: Ecological Relationships, Cell Form and Function, DNA and Genetic Variation and Biodiversity through Evolution.

Consultant Chemistry Level I (1 credit)

Chem I is an introductory lab course designed to meet specific standards in chemistry, with coursework adapted to meet the needs of individual students. The course uses a variety of instructional strategies to provide students the skills needed to understand concepts in chemistry focusing specifically on topics related to matter and energy.

Consultant Physics Level I (1 credit)

This is a course is designed for those students planning to attend a two year or certificate program at a community college or trade school. Course topics are: basics of motion, Newton's Laws, momentum, work, energy, power, simple machines, sound, light, and electricity. Enrollment into this course is through the IEP process of by teacher recommendation.

Environmental Science (1 credit/3 potential Thomas College credits) (Grades 11 & 12)

An elective science course designed for students interested in pursuing a career in environmental studies including forestry, ecology, warden service, environmental science, outdoor recreation, and/or wildlife biology. Course will introduce students to basic concepts in environmental and earth science such as ecology, ecosystems, energy, climate change, water and air quality, pollution, waste management and sustainability. Emphasis will be on developing data literacy and critical thinking skills through project-based learning with a focus on issues relevant to Maine. Students must be prepared to spend some time outside in all seasons. (Prerequisite: Biology Level I) Students must earn a C or better to earn Thomas College credits.

Forensic Science (1 credit)

A course designed to study the application of basic biological, chemical, and physical science principles and technological practices as they apply to civil and criminal law. Students will study concepts through a combination of case studies and the use of laboratory techniques. Emphasis will be placed on the scientific practices outlined in the Next Generation Science Standards, with special attention to critical thinking, problem solving and supporting conclusions with sound evidence and scientific reasoning.

Honors Biology Level I (1 credit)

Honors Bio I is an introductory course designed for highly motivated students to prepare them for advanced level work in science. Students will use critical thinking and writing skills, discussion, group work, laboratory investigations and projects while exploring organisms and their environment, molecular biology, cell form and function, genetic variation, and biodiversity through evolution. Students are expected to demonstrate in-depth understanding and strong work ethic. Enrollment in this class is dependent upon teacher recommendation and maintenance of an 85-grade average.

Honors Chemistry Level I (1 credit)

Honors Chem I is an introductory course designed to prepare highly motivated students for advanced level work in science. Students will use critical thinking and writing skills, discussion, group work, laboratory investigations and projects while working to meet specific chemistry standards. Students are expected to demonstrate in-depth understanding, independent thinking and a strong work ethic. Enrollment in this class is dependent upon teacher recommendation and maintenance of an 85-grade average.

Honors Physics Level I (1 credit)

This is an introductory course designed for highly motivated students to prepare them for advanced level work in science. The course outcomes will be based on the important physics concepts all American citizens should understand, focusing specifically on the following topics such as motion, energy, heat, sound, electricity and magnetism, light. Emphasis is placed on learning important concepts through laboratory activities. (Prerequisite: Honors level mathematics is highly recommended, and a teacher recommendation is required.)

Physics Level I (1 credit)

This is an introductory course designed to meet specific standards based on the National Science Standards as well as the Maine Learning Results. The course outcomes will be based on the important physics concepts all American citizens should understand, focusing specifically on topics such as motion, energy, heat, sound, electricity, magnetism, and light. Emphasis is placed on learning important concepts through laboratory activities, Ability to work with decimals, fractions, and algebra is required.

Physics Level II (1 credit)

An elective supplemental physics course designed for students interested in pursuing a college course of study in engineering or science. Course will focus on the continuation of the study of motion, circular and satellite motion, energy, electricity, thermodynamics and hydraulics. (Prerequisite: Physics Level I)

SOCIAL STUDIES DEPARTMENT

AP American Government (1 credit) (Grade 12)

Students will be accepted into this course based on the recommendation of the U.S. History teachers and the requirements approved by the Social Studies Department and the School Board. To remain in this course, the student must demonstrate consistent study habits, be highly self-motivated, demonstrate good writing skills and have the ability to analyze and interpret information. The curriculum is designed to give a more in-depth study of American Government. Supplemental materials and research are used frequently in addition to the text. Summer reading, a journal, and year- long portfolio are required. Students enrolled in this course will be expected to take the AP exam to determine college credit. The curriculum for the Advanced Placement test will be followed.

AP United States History (1 credit) (Grade 11)

This fast-paced rigorous course will cover from exploration through the 2000s. Students will be expected to complete research papers, book reports, and supplemental reading and to actively participate in classroom discussions. This course is designed to prepare students for the senior AP Government course. Students will be expected to take the AP exam. The results of the exam will determine college credit. This course has a limited enrollment and selection will be based on the recommendations from sophomore teachers.

AP World History (1 credit) (Grade 10)

This is a rigorous course designed for students who enjoy a challenge. The class will study the cultural, economic, political, and social developments that have shaped the world from c. 1200 CE to the present. Students will analyze texts, visual sources, and other pieces of historical evidence as they relate to themes of world history. The curriculum for the Advanced Placement provided by the College Board will be followed and students will take the AP test in May. If students earn a passing grade of 3 on the exam they will receive college credit.

College American Government (1 credit) (Grade 12)

This course is designed to give college bound students an overall view of the structure, functions, duties and responsibilities of the American system of government. In addition, world governmental systems, economies, and foreign policy issues are explored. A discussion of contemporary issued will be carried on throughout the year. Selected readings and periodicals are used to supplement the course. A year-long portfolio is required. Students will be required to have a three to four inch binder. Topics will include unites on political philosophy, political parties, voting and citizenship, the political process (media, campaigns, election, and public opinion), the basis of democracy, federalism, forms of government, and economic systems. The course includes units on historical foundations of the Constitutional government in the United States, an in-depth study of the Constitution, civil rights and liberties, the legislative branch, the executive branch, the judicial branch and American foreign policy.

College Options American Government (1 credit) (Grade 12)

This course is designed to give students an overall view of the structure, functions, duties, and responsibilities of the American system of government. A discussion of contemporary issues will be carried on throughout the year. Extra emphasis will be given to hands on and project-based learning. Outside reading will be done from newspapers and magazine articles. A year-long portfolio will be required. Students will be required to have a three- or four-inch binder. Topics include units on political philosophy, political parties, voting and citizenship, the political process (media, campaigns, elections, and public opinion), the basis of democracy, federalism, forms of government, and economic systems. The course includes units on historical foundations of the Constitutional government in the United States, an in-depth study of the Constitution, civil rights and liberties, the legislative branch, the executive branch, the judicial branch, and American foreign policy.

College Options United States History I (1 credit) (Grade 11)

This course covers the same material as the college program. Greater emphasis is placed, however, on skills such a map reading, graphs, pictures and social issues.

Consultant American Government (1 credit) (Grade 12)

This course covers the basic American political system and foreign affairs. By using a team-teaching approach, attention is given to the individual needs and learning styles of students. Contemporary issues and the use of periodicals are used to enhance citizenship responsibilities and view world issues. Extra emphasis will be given to hands-on and project-based learning. A year-long portfolio will be required. Students will be required to have a three-inch binder.

Consultant Geography (1 credit) (Grade 9)

This course covers the same curriculum as Geography except it is taught at a slower pace than the traditional program. There is emphasis placed on repetition, life skills such a map reading, and hands-on activities. This course is taught using a team-teaching approach which includes a social studies teacher and a special education teacher. The format allows for more individualized instruction and smaller class size.

Consultant United States History I (1 credit) (Grade 11)

This course will cover the same curriculum as the college program; however, greater emphasis is placed on hands-on activities, reading skills and small group projects.

Culture and Society (.5 credit) (Grade 10)

Topics Covered: Lasting Contributions, Global Connections, Sports, Literature, Fashion, Music Unique cultures have existed from the beginning of time. What makes a culture? Why are they so different? In this course, students will study a variety of cultures to examine their makeup (sports, fashion, literature, music, etc.) and lasting contributions to society. Students will also learn about increasingly significant global connections between cultures and how this shapes the society that we live in.

Geography (1 credit) (Grade 9)

Topics will include an introduction to geography in the form of map work to familiarize the student with the major land and water features of the world. In addition, the five themes of geography will be taught and continually emphasized throughout the year. The physical and cultural geography of the Middle East, Europe, Indian Subcontinent, East Asia, sub-Saharan Africa, and Australia will be covered including emphasis on current events in each region.

Honors Geography (1 credit) (Grade 9)

Students will be accepted into this course based on the requirements approved by the Social Studies department and the School Board. This course follows the geography curriculum, but more supplemental materials will be utilized in the class instruction and more research skills and projects will be stressed. The level of instruction and expectations for performance are demanding. Topics will include an introduction to geography in the form of map work to familiarize the student with the major land and water features of the world. The five themes of geography will be taught and continually emphasized throughout the year. The physical and cultural geography of the Middle East, Europe, Indian Subcontinent, East Asia, sub-Saharan Africa, and Australia will be covered including emphasis on current events in each region.

Introduction to Political Science (.5 SAHS Credit/3 potential Thomas College credits) (Grades 11 & 12)

An overview of the basic principles, terminology and methods used to study politics in the United States and around the world. This course also will introduce students to international politics, political thought, and the decision-making process.

Psychology (.5 SAHS Credit/3 potential KVCC credits) (Grades 11 & 12)

This course reviews the history of development of psychology, careers, psychological approaches, research methods and statistics, basic types of therapies, contributors, theories of personality and learning, and brain research. Students will explore research and theory and examine its personal and professional applications.

Revolutions (.5 credit) (Grade 10)

Topics Covered: Social, Economic, Political, Music

Throughout the course of civilizations, there have been incidents that have forever altered human history when ordinary people united to bring about change. In this course, students will seek to understand the causes of revolutions (social, political, economic, and even musical!), inspirations for revolutionaries, and strategies used. In the end, students will be able to compare/contrast revolutions and explain how they changed the world.

Technology Through History (.5 credit) (Grade 10)

Topics Covered: Military, Architecture, Transportation, Medicine, Digital Age, Ancient Technology

We're surrounded by inventions. Consider the clocks, appliances, and transportation that coordinate our days. Or TVs, cell phones, and social media that connect us to each other. Or how the buildings, medical advances, or how we power our world shapes our lives. Where do these inventions come from? How do they work? How do they reflect - or possibly define - the values of our culture? You will be introduced to the history of technology and how societies and cultures have been shaped by various forms of technologies. Discover how technology has completely shaped and changed the course of human history and trace its innovation and impact on the course of history and today.

United States History I (1 credit) (Grade 11)

U.S. History will focus on events starting with World War I. Students will continue their study of the United States through the 1920's and the Great Depression. The course is designed to prepare the prospective college student by focusing on present day problems and discussing possible solutions in light of past experiences in American History. Students will continue the study of history from World War II and move through the Korean War, the Cold War, the Civil Rights Movement, the Vietnam War and the 70's, 80's and 90's.

War and Conflict (.5 credit) (Grade 10)

Topics covered: War, Genocide, Political Conflict, Crime, Social Conflict

For thousands of years, conflicts between opposing nations and societies have had important effects on all aspects of human civilization. While the most direct and recognizable impacts of conflict is warfare, conflict often creates as well as destroys. Conflict has demanded the adoption of complex economic systems, shaped the ideology and culture of nations, promoted developments in art, literature, technology, and spread faith across the globe. This class will examine the rationale of conflict within our society and history and will explore the cultural and societal roots of wars, genocides, and other political conflicts.

WORLD LANGUAGE DEPARTMENT

At all levels, students are expected to limit the use of English.

French I (1 credit)

French I emphasizes the acquisition and comprehension of French vocabulary and eventually speaking, reading, writing, and grammar. Active participation is part of the course. This involves learning through movements, acting out skits and storytelling.

French II (1 credit)

French II will be a continuation of the techniques used in French I, incorporating grammar and expanding vocabulary. Students will do more speaking, reading, and writing in French. The majority of the class is taught in French. Students will continue to learn through stories.

French III (1 credit)

French III stresses the development of the students' ability to use vocabulary, idioms and grammatical structures to communicate a sequence of ideas. Written and oral skills are further developed using stories, readings, compositions, and pictures to provoke communication. Short stories and reading are introduced. Varied conversational topics are introduced to promote active discussions in French. Students will continue to learn through stories. Students are expected to try to use French as much as possible.

French IV (1 credit)

French IV will continue the techniques used in French III. Students will discuss and write about readings, stories, pictures, and other authentic French materials. Emphasis will be placed on speaking, creative writing and working with French materials. Students will continue to learn through stories. Students are expected to use French in class.

German I (1 credit)

Students will learn the basic sentence patterns through movement, dialogues, videos, storytelling and technology. Students will learn vocabulary for long-term memory through gestures, by listening to and seeing stories acted out, and by re-telling the story with partners and to the class. Students will read short articles and short stories. Student participation is very important. Students will first learn through listening and comprehension activities and will gradually speak and write.

German II (1 credit)

Students will continue to learn through storytelling, music, and technology. They will learn grammar through stories, articles, and dialogues. Students will act out scenes, stories, folk tales and legends. They will also engage in paired speaking activities.

German III (1 credit)

Students will continue to learn through storytelling, music, and technology. Students will read and discuss the main ideas and themes of short stories, tales, legends, magazine articles, etc. They will also continue to engage in speaking activities.

German IV (1 credit)

Students will continue to learn through storytelling, music, and technology. Students will discuss and write about the current topics culled from foreign language sources on the Internet, stories, poems, and short books. Students will discuss and write about these themes in German.

Spanish I (1 credit)

Spanish I will be taught mainly in Spanish, emphasizing comprehension through movement. Participation in class is expected. Emphasis will be on communication first listening skills and then speaking. Storytelling techniques will be employed as well. Grammar will be taught through the stories.

Spanish II (1 credit)

Spanish II will be a continuation of the techniques used in Spanish I, incorporating essential grammar. Students will be expected to do more reading, writing, and speaking in the Spanish language. Students will continue to learn through storytelling.

Spanish III (1 credit)

Spanish III is for students who have completed two years of high school Spanish in good standing. Equal emphasis is placed on reading, writing, and speaking. An introduction to Spanish literature will be included.

Spanish IV (1 credit)

Spanish IV is for students who have completed three years of high school Spanish in good standing. It consists of a fast-paced review of Spanish grammar, pronunciation, and vocabulary, with an emphasis on oral communication. Following this initial review, the classes will study advanced grammar and Spanish culture through the reading of Spanish literature. Textbook: *Galería de Arte y Vida*

SOMERSET CAREER AND TECHNICAL CENTER

Courses at the Center are available to juniors, seniors, and some eligible sophomores from all Somerset County school districts. Students must complete an application for a program and attend an interview with the program instructor.

Automotive Technology I & II (3 credits each year)

The Automotive Technology program is a two-year course involving the repair and servicing of gasoline and diesel powered cars and light trucks. Included is technical theory as well as hands-on practical operations related to automobiles. The students study all the various systems of today's automobiles, including: cooling, fuel delivery, ignition, starting, charging, suspension, drive train and brakes. The first year student is taught to perform all phases of general repair work in a safe manner on cars and light trucks. Students also test, diagnose, and repair various components of the vehicles. In the second year, the students move more towards the electrical aspect of the automobile/light truck. Such as starting and charging systems as well as computerized engine controls, anti-lock brakes and air bag systems. Beyond technical skills, top priorities of the program are to instill in the student: a good work ethic, to work safely, to accept responsibility, and to work well with their fellow workers. Much of the lab work is done on "live" jobs scheduled as work projects by members of the community and school staff. Cutaways, mock-ups and shop vehicles are also used in the training process. Students are allowed to do repairs to their own vehicles provided the work is appropriate for the curriculum. During the two years that the students are with the program, they are taken on field trips to: area garages, dealerships, parts stores, machine shops, and technical colleges. In addition, representatives from companies such as Standard Ignition, Sealed Power, Technical Colleges and others, come to our school to give the students valuable information pertaining to the automotive field. The Automotive Technology program has an impressive record of graduates who have gone on to continue their life's work in the automotive field. They work as service managers, automotive technicians, military mechanics, garage owners, service station operators, specialists, auto parts store counter persons, parts managers, salvage yard owners, new or used car salespeople, insurance adjustors, and a variety of other occupations that require mechanical knowledge and skills.

Cooperative Education (3 credits)

The Cooperative Education Program is a School-to-Work/School-to-Career Program that helps students experience job placement in business and industry. The program is designed so that a student will spend part of the school day in the academic setting and part of the day on the job. The objective of the course is to find training stations that will meet the needs and interests of the students who desire occupational training. Prior to entering work experience activities, a Cooperative Agreement stating the expectations of the program is signed by the student, parent, school personnel and employer. Each student is required to take the Cooperative Education related class that provides instruction in world of work responsibilities. Some of the units presented are how to acquire employment, personal development, the important of health and grooming, employee-employer relationships, types of insurance and various consumer education topics. Students have the opportunity in the Cooperative Education Program to enter into the Pre-Apprenticeship program in a trade area. Students who complete the Pre-Apprenticeship Program will be eligible to enter the Maine Registered Apprenticeship program upon graduation and will apply documented hours to the Apprenticeship program in their trade area. Participation in Somerset Career & Technical Center's Cooperative Education program allows students who are employed to work during school hours. All Skowhegan Area High School students are expected to be scheduled in a minimum of five blocks of classes. The Cooperative Education program represents one of those five blocks and leaves up to three blocks to be work release time. A student who believes that their employment, career goals and educational plan warrant more than three blocks of work release may make a request to the SCTC Cooperative Education instructor and the SAHS administration for consideration.

Culinary I & II (3 credits each year)

This is a two year program offering students a chance to develop job entry level skills and the proper work attitude for the food industry. The first year is based on the front and back house duties of operating a restaurant. Tasks included are: waiting on customers, handling money, and properly presenting food. The first year includes the basic skills of food preparation and cooking such as the producing of stocks from which soups and sauces are made, applying heat for beef, poultry and fish, baking of desserts and breads. The second year provides further experience in improving basic skills through more in-depth hands-on experience. Instruction is provided for menu planning and business practices necessary for operating a small restaurant. Students may receive 1-3 duel enrollment credits from Maine Community Colleges and "Serve Safe" certification.

Digital Graphic Arts I & II (3 credits each year)

This two-year course teaches the digital approach to typesetting, page layout, illustration, and image manipulation. To accomplish this, the lab is well equipped with G5 Macintosh computers, scanners, digital cameras, drawing tablets, digital color printers and high-resolution inkjet printers. Students will learn to use the current version of Adobe Creative Suite professional level software. In the first year of the program, students learn the basics of typography, page design and layout, illustration, basic scanning and digital imaging. While some lessons are class-wide with the students and instructor participating in discussions and demonstrations, most lessons are delivered via individual training manuals allowing students to proceed at their own pace. Skills are practiced and perfected by completing jobs and projects for local school districts and area non-profit organizations. Students will also develop school-to-work transition skills including resume writing and portfolio development. Students will continue to learn and practice intermediate and advanced levels of the software using the same instructional methods while practicing those skills on more sophisticated and challenging graphic arts projects. Students who successfully complete the senior year curriculum may be able to earn college credits issued by various Maine colleges.

Early Childhood Education I & II (3 credits each year)

The Early Childhood Education program is a two year course for CTE students who are interested in working with young children. This program is an exploration of all aspects of child growth and development from birth through age eight. Students will engage in rigorous coursework to include: theories of child development, psychology and sociology, skills and knowledge in health and safety, child development, guidance, discipline, social/emotional growth, cognitive development, curriculum planning. In the first year of the program students work to complete the State of Maine Early Childhood Teacher Assistant Certification. As part of this state recognized certification, students are required to complete 180 hours of instructed time, 180 hours of field experience working with young children, CPR and First Aid Certification and take the National Occupational Competency Test. In the second year, students complete coursework in Early Childhood Education in partnership with Kennebec Valley Community College. This will provide them college credit through our dual enrollment agreement. They may also choose to participate in independent field experience in local pre-k and public elementary school programs.

Electrical Construction I & II (3 credits each year)

Electrical Construction is a two year program designed to cover the common wiring practices used in residential applications. Hands-on projects in the shop account for a large portion of the first year student's time. Students, when working in the shop area, are independent and self-paced. Along with work in the shop, student study units in the National Electrical Code, basic electrical theory, conduit bending, and schematic wiring diagrams. Student also have the opportunity to acquire a Maine Electrical Helpers license and an OSHA-10 safety certification, which will greatly enhance their ability to land a summer job in the electrical field. Second year students study advanced units of the National Electrical Code, blue print reading, solar energy, and fire alarm systems. These students divide their time between shop and real electrical projects. In the shop, students install service entrance equipment and design and build motor control circuits. The students work on electrical projects through the school and install the electrical systems in the houses and other projects built by the Carpentry students. Students completing both years of the program have the opportunity to earn college credits in the Maine Community College system.

EMT Emergency Medical Technician Basic (3 credits)

This course is an introduction to patient assessment skills. Content includes the management of airway and respiratory problems, cardiopulmonary resuscitation, techniques of oxygen therapy, bleeding control and treatment for shock, soft tissue injuries and fracture care, principles of spinal immobilization, fundamentals of triage and transportation of the sick and injured, and treatment modalities for a range of medical, obstetrical, pediatric, environmental and behavioral emergencies. Upon successful completion of the course, students will earn 5 credits from KVCC for EMS 111 and get to sit for the EMS basic Certification Exam.

Health Care Careers (3 credits)

This is a one-year program for juniors or seniors pursuing any health care career. The Maine State Nursing Assistant Curriculum and Competencies serve as a stepping-stone to increase your healthcare knowledge, allowing you to develop basic and intermediate patient care skills. Relevant job shadows will increase your knowledge of the interdisciplinary healthcare professions and assist you to make an informed decision when choosing your college healthcare major. Passing the State Examination will enable you to be hired and work as a C.N.A. your senior high school year and through college if you wish. CPR and First Aid certification are offered. KVCC's 3 Credit Medical Terminology Course - Dual Enrollment - is included in this program.

Job Skills (3 credits)

The Job Skills Program will focus on teaching students the skills to be successful in a variety of jobs. The curriculum covers the basic skills in several different programs such as Building Trades, Culinary Arts and Automotive Technology. Other skills will be added as needed to align with individual interests. Students will be learning the soft skills necessary many career field. The program will foster an environment for students to learn about careers, safety, team building, positive attitudes, and work habits that meet employment standards.

Outdoor Leadership & Skills I & II (3 credits each year)

This two-year course is designed to introduce students to the natural resources and outdoor recreation industries. The course is based on the traditions of the Maine Guide. A Guide must have a broad base of outdoor knowledge; must provide guests with outstanding service, and most importantly, must be a safe and responsible leader. Units of study will include: Guest Services, Forestry, Wildlife, Conservation, First Aid and CPR, Map and Compass, Surveying, Global Positioning Systems, Wilderness Rescue, Whitewater Rafting, Wilderness Canoeing, Personal Development, Team Development, Problem Solving Initiatives, Leadership, Decision Making, Trip Planning and Logistics, Management Training and Canoe Building. The successful student will have skills necessary to work in a variety of natural resources or outdoor recreation positions. The course provides an excellent introduction for students seeking advanced study at a technical or academic college. Successful students earn 3 college credits at Washington County Community College and 6 college credits at the University of Maine, Presque Isle. Students can earn industry-recognized certifications in Swiftwater Rescue, Whitewater Canoeing, First Aid, CPR and AED, OSHA Safety, and Welcome ME. They also can obtain their Maine Camp Trip Leader Permit and Registered Maine Guide License.

Pre-Engineering - Computer Science (80 minutes) 1 credit

Learn what it means to "program" and focus on solving problems using code. Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. Students will have the option to take the AP Computer Science Principles exam at the end of the class for potential college credit.

Pre-Engineering – Full Course (240 minutes)

Includes all topics covered in the individual courses: structures and robotics. In addition to structures and robotics, Day 1 one will include 3D Engineering Design and Day 2 will include Computer Science. Please refer to each individual course for a complete description. Students in the full pre-engineering course will also have the opportunity to obtain an OSHA 10-hour safety certification.

Pre-Engineering – Robotics (80 minutes)

In this course students will use robotics to explore the fundamentals of engineering and electronics. Topics of discussion will include engineering, physics, electronics, mechanics and computer programming. Laboratory experiments will require students to build robots and demonstrate these principles. Experiments include: - design and build a simple hydraulic robot, build and program a robot that uses sensors to navigate its environment, build a VEX robot to compete in multiple classroom challenges, build an underwater remote controlled vehicle. Open to sophomores, juniors and seniors.

Pre-Engineering - Structures (80 minutes)

This course is an introduction to structural design concepts, structural performance, materials, loads, factors of safety and aesthetics. Discussions will include how certain structures function and lessons learned from structural failures. Students will use design software to create and test their designs prior to production. Projects in this course include the design and build of:

cardboard boats for either one or two people, various trusses, balsa wood bridges, a concrete canoe. Prerequisites: Successful completion of Algebra 1 and Geometry.

Pre-Engineering - 3D Engineering Design (80 minutes) 1 credit

See designs come to life using the 3D modeling software *Solidworks* and Ultimaker 3D printers. Computer-aided design systems are used by designers and manufacturers in virtually every industry to create engineering design solutions. Examples of class projects include rubber band race cars, model rockets, redesigning parts for a drone and building prosthetic hands.

Residential Construction I & II (3 credits each year)

Learn multi skill job applications by entering into a challenging world of building technology. Rewarding careers begin from this 2-year entry-level course giving students with positive attitudes the opportunity to enter into available job market for skilled workers. Technology skills obtained in this course include: architectural house design (drafting and computer assisted drafting), practical applications of math and science skills, earn college credits, national accredited training facility for NCCER, Maine uniform and building & energy codes, work ethic skills for industry, job interview skills, house framing, concrete foundations, interior finish, mechanical systems. Careers graduates may pursue include: architecture, engineering, general contracting, residential carpenter, building construction-secondary colleges, trade schools.

Welding Systems (3 credits)

The Welding Systems program is a one-year program available to senior students. Students work in a construction environment while studying the National Center for Construction Education and Research Core and Level One Welding curriculum. Throughout the year, students will cover the following instructional modules: Basic Safety, Basic Construction Math, Introduction to Hand Tools, Introduction to Power Tools, Introduction to Construction Drawings, Basic Communication Skills, Introduction to Material Handling, Oxyfule Cutting, Plasma Art Cutting, Air Carbon Arc Cutting and Gouging, Base Metal Preparation, Weld Quality, Shielded Metal Arc Welding-Equipment Set Up, Shielded Metal Arc Electrodes, SMAW-Beads and Fillet Welds, Joint Fit-Up and Alignment, SMAW-Groove Welds with Backing, SMAW-Open V Groove Welds. Students have the opportunity to obtain the following credentials: OSHA Ten Hour Safety Certification, American Welding Society Certification, Cianbro Welding Certifications, NCCER Credentials. The Welding Systems program has an articulation agreement with Southern Maine Community College. This allows students to earn college credits at SMCC while still in high school.