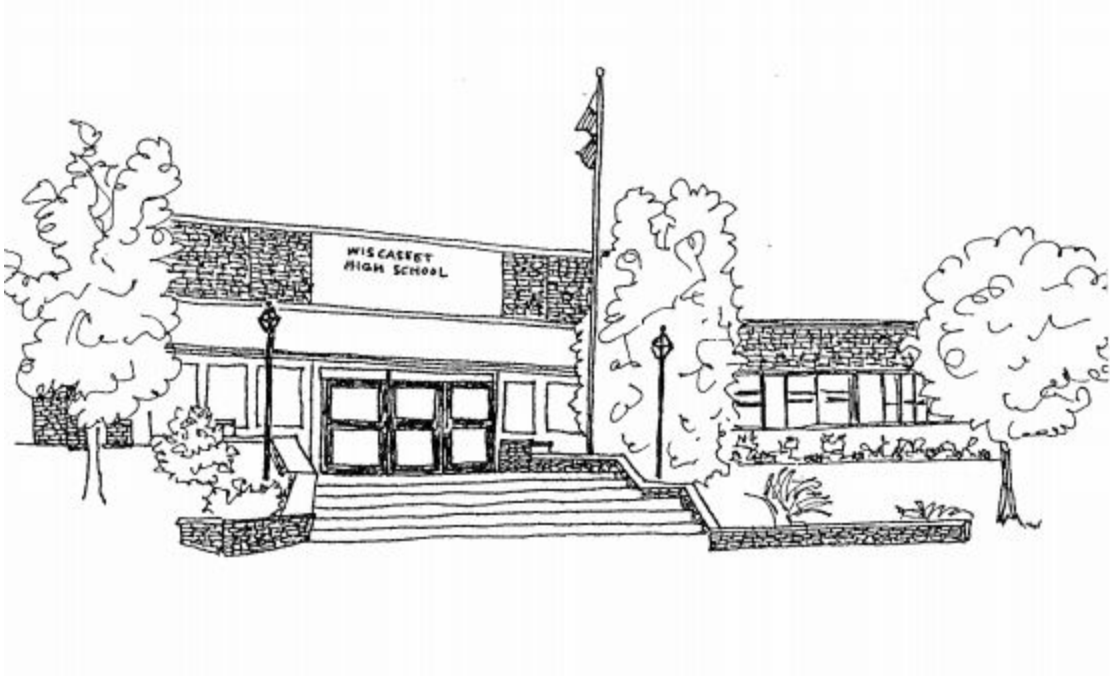


# Wiscasset Middle High School

**Grades 9, 10, 11, 12**

Program of Studies  
2019 - 2020



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Wiscasset, Maine 04578  
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*"Dedicated to cultivating an environment that honors  
growth and change for all learners"*

**NEASC Accredited**

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## **ACADEMIC PLANNING**

### **OUR CORE VALUES**

- Our community recognizes the strength and potential of teaching and learning
- We are dedicated to cultivating an environment that honors growth and change for all learners.

### **WISCASSET MIDDLE HIGH SCHOOL BELIEFS**

- Self-esteem builds confidence, encourages healthy risk taking, and enhances learning.
- Optimal learning is the responsibility of the entire community.
- Individuals should aspire to reach a high level of performance.
- Individuals must be involved in planning, monitoring and assessing their education.
- Different learning styles must be honored.
- A trusting and respectful relationship serves to inspire and motivate.

### **OUR SCHOOL WIDE LEARNING EXPECTATIONS**

Each Wiscasset school student will leave school as:

#### **1. A Clear and Effective Communicator**

Standard A: Understands the attributes and techniques that positively impact constructing and conveying meaning for a variety of purposes and through a variety of modes.

#### **2. A Self-Directed and Lifelong Learner**

Standard B: Understands the importance of embracing and nurturing a growth mindset.

#### **3. A Creative and Practical Problem Solver Who:**

Standard C: Is skilled at selecting and applying a process of problem-solving to deepen understanding and determine whether redefining the goal is a better way of addressing a problem situation and continuing to consider other alternative solutions until one resonates as the best one.

#### **4. A Responsible and Involved Citizen**

Standard D: Understands the interdependence within and across systems and brings to each situation the appropriate actions.

#### **5. An Integrative and Informed Thinker**

Standard E: Is skilled at using complex reasoning processes to make meaning.

## Graduation Requirements for Class of 2020

The Wiscasset School committee has set the minimum number of credits required for a Wiscasset Middle High School diploma at 24. Credits are awarded upon the successful completion of semester or year-long courses. A minimum grade of 70 is required. Credits vary based on the length of the academic course completed.

It is important to note that the State of Maine has passed legislation requiring high schools to award diplomas based on proficiency instead of credits. Wiscasset will begin awarding proficiency-based diplomas with the class that graduates in June 2021. The current credit-based graduation requirements apply to students graduating prior to June 2021.

### Specific Core Requirements:

Subject	Credits Required (2020 class)	Classes Required	
English	4	English 9, English 10, English 11, English 12	
Math	3	Algebra and Geometry	
Science	3	Integrated Science (1.0), Biology (1.0), Science Electives (1.0)	
Social Studies	3	World Cultures, American History, Principles of Democracy	
Foreign Language	1		
Fine Arts	1.5	Must earn credit in 2 of the 3 areas: Visual Arts, Drama, Music	
PE	2	Introduction to Physical Education (formerly known as Fitness & Wellness) plus three PE electives	
Health	.5	Foundations of Health Education	
Consumer Ec	.5	Consumer Economics	
Career Prep		Required Activities Listed in the Advisory Program.	Students will earn 1 credit upon successful completion of community service
Electives	6.5		

## Graduation Requirements for Class 2021-2022

It is important to note that the State of Maine has passed legislation requiring high schools to award diplomas based on proficiency instead of credits. To be awarded a high school diploma from the Wiscasset Middle High School, students graduating in the Class of 2021 and beyond must demonstrate proficiency in the content areas identified in Maine’s system of Learning Results, meet the cross-content performance standards set forth in the Guiding Principles of the Learning Results, experience a minimum number of experiences in specific core requirements (see table below\*), and fulfill all additional graduation requirements set by the Board. The school committee may be revising the graduation policy due to changes that occurred in the 2018 legislative session. The possible revisions would include a combination proficiency and credit-based system.

- A. Demonstrate proficiency in meeting state approved standards in the content areas required by Maine statute. Meeting the standards entails demonstrating proficiency for each standard within each content area:

- English Language Arts
- Mathematics
- Science and Technology
- Social Studies
- Health Education and Physical Education
- Visual and Performing Arts
- World Languages
- Career and Education Development (embedded in programming, to be met by class of 2022 and beyond)

- B. Meet the cross-content performance standards set forth in the Guiding Principles of the Learning Results.

A student graduating from Wiscasset Middle High School is expected to be a:

- 1) Clear and effective communicator; 2) Self-directed and lifelong learner; 3) Creative and analytical problem solver; 4) Responsible and involved citizen; and 5) Integrative and informed thinker.

\*Specific Core Requirements in addition to meeting standards:

Subject		Recommended classes to take to meet standards and determine proficiency.	Learning Experiences for 2021
English		Facing Challenges in Literature, Exploring Identity through Literature, English 11, English 12	Engage in English Language Arts experience each year in high school
Math		Algebra I, Geometry, Algebra II	Engage in a Mathematics experience each year in high school
Science		Integrated Science, Biology, a physical science, Intro to Engineering	Engage in a Science & Technology experience each year in high school

Social Studies		World Cultures, American Studies, Principles of Democracy	Engage in at least three Social Studies experiences in high school.
Foreign Language		At least one year of a foreign language. Level II study is no longer required to meet proficiency.	Engage in at least one World Language experience in high school
Fine Arts		At least one year of study in Visual and Performing Arts (Studio Art, Drama, and Music).	Engage in at least one Visual or Performing Arts experience during high school
PE		PE 1 and PE 2. Intro to Physical Education & PE electives have been combined into PE 1 and PE 2.	Engage in at least one PE and health experience during high school
Health		Intro to Health & health elective	See PE
Applied Art			Technology standards connected to Science content area.
Career Prep		Required Activities Listed in the Advisory Program.	Same required activities tied to career prep standards.
Electives			

## LEARNING OPPORTUNITIES

### STEM Endorsement

Beginning with the Class of 2021, students at WMHS will graduate with a proficiency based diploma. **Students who choose to take *additional courses* in STEM areas can earn a STEM Endorsement on their diploma and transcript, signifying that they met and exceeded the STEM standards.**

While students pursuing an Endorsement option are still required to complete Wiscasset's regular graduation requirements, the STEM Endorsement allows students to tailor their own educational experiences and choose elective courses based on individual interests and the development of 21st century skills. The STEM Endorsement option also helps focus student thinking about the direction of their education and prepare students for careers and/or academic pursuits after high school.

**To earn a STEM Endorsement, students must:**

Complete 4 years of Core Science Classes	Complete 4 years of Core Math Classes	Complete Core STEM classes	Complete at least 4 STEM electives	Participate in at least 5 ELOs
Example: - <i>Integrated</i>	-Example: - <i>Algebra 2</i>	- <i>Intro to Engineering</i>	Example: - <i>Computer Science</i>	Example: - <i>Maine State Science</i>

<i>Science</i> - Biology - Chemistry - Physics	-Geometry -Trigonometry -Calculus	- Principles of Engineering	Principles -AP Biology -Advanced Engineering Seminar	Fairs (4 years=4 ELOs) -Science Tutoring
<b>AND complete a Senior Capstone STEM project.</b>				

To initiate the pursuit of an Endorsement option, students submit a “Declaration of Intent Form,” and become identified as “Endorsement Candidates.” Students who complete the endorsement requirements will be deemed “Endorsement Recipients.” Upon graduation “Endorsement Recipients” will receive special distinction.

Maine Department of Education’s position on S.T.E.M. education:

“S.T.E.M. teaching and learning can: positively impact career options and decision-making; strengthen Maine’s economy; foster informed and successful citizens; elevate the aspirations of Maine students. Science, technology, engineering and mathematics are foundations of an advanced society. If we wish to ensure equitable access to high wage, high growth employment for Maine students, learning in these areas must also be a part of the educational foundation for all Maine students.”



### Virtual High School

Virtual High School provides over 200 courses for high school students via online access. There are 18 AP courses available, as well as a host of other electives. Students who are interested in taking one of these courses may discuss this option with Guidance; priority will be given to juniors and seniors. If it is determined that the student is eligible in terms of credits, the student will take the course online with the technical support of a Wiscasset Middle High School site coordinator. Each course has its own instructor who may be outside of the state of Maine, but with whom students can interact online. These courses are designed for students who are able to function independently with an online community of students from all over the United States and the world.

**VHS CLASSES ARE AN OPTION FOR STUDENTS WITH A 3.0 CUMULATIVE GRADE POINT AVERAGE AND MAY NOT BE USED TO REPLACE A WMHS REQUIRED CORE CLASS UNLESS THERE IS A SCHEDULING CONFLICT. WHEN THERE IS A SCHEDULING CONFLICT, THIS MUST BE APPROVED BY THE PRINCIPAL. AN APPLICATION, APPROVED BY THE GUIDANCE**

**COUNSELOR, DEPARTMENT HEAD AND SIGNED BY A PARENT, MUST BE SUBMITTED THE BEGINNING OF EACH NEW SEMESTER. THE NUMBER OF VHS COURSES A STUDENT MAY ENROLL IN MAY BE LIMITED BY AVAILABILITY OR ADMINISTRATIVE DISCRETION.**

### **Community Service**

Students are required to complete 24 hours of community service throughout their high school experience. Service hours must be volunteer and can not be paid. We recommend that students complete 6 hours/year and spread out their volunteer experience over 4 years. Advisors will track the hours completed. Forms must be signed by the supervising adult of the community service, which may not be a member of the student's family, immediate or extended. **Upon successful completion of community service, students will be awarded 1 credit.**

### **Independent Study**

The Independent Study option available to students with a 2.5 grade point average in the most recent two quarters. Credit may vary, but generally 1/2 credit is awarded for each semester of independent study. **A WRITTEN PROPOSAL, APPROVED BY THE SUPERVISING TEACHER AND SIGNED BY A PARENT, MUST BE SUBMITTED PRIOR TO THE BEGINNING OF EACH NEW SEMESTER OF THE SCHOOL YEAR.** Independent Study proposal forms can be obtained in the Guidance Office. Administrative approval is also required for any independent student proposal submitted.

### **Early College Courses**

Juniors and seniors who are on track for graduation and have a 3.0 cumulative average may begin college courses and earn credit while still in high school. State grants and tuition assistance programs through the colleges fund course tuition. The University of Maine at Augusta and Southern Maine Community College offer courses at the midcoast Campus at Brunswick Landing. Central Maine Community College offers classes at its Damariscotta Education Center. There are a number of colleges offering online classes. Students must provide their own transportation to these sites, cover the costs of books & fees, and meet entrance requirements. Students receive both high school and college credits for early college courses. Interested students should see the school counselor in May-June prior to the fall semester and in November for the upcoming spring semester.

### **Advanced Placement (AP)**

Certain advanced courses taught at the high school are designated AP and prepare students to take the College Board Advanced Placement exams. A qualifying score on the AP test enables students to waive introductory college courses and/or earn college credits. Colleges and universities all handle AP scores differently so students are encouraged to inquire about specific policies at schools of interest. Wiscasset Middle High School offers the following AP courses:

A.P. English Language and Composition  
A.P. English Literature & Composition  
A.P. Biology  
A.P. Chemistry



A.P. United States History  
A.P. Studio Art  
A.P. Computer Science

Other courses may be offered contingent upon student interest. AP classes are also available online through Virtual High School.

### **Mentorships**

WMHS has mentorships for 12<sup>th</sup> grade students. The goal of the program is to better prepare students for work, post-secondary education, and citizenship. It is a genuine opportunity for students to merge their various interests and passions with their academic lives at school. It is also a vehicle for students to demonstrate their independence and complexity of thought as they build bridges from their high school careers to their future academic, professional or vocational lives. The mentorship experience is an 18-week (Semester) or 36-week (Full Year) course fulfilling elective credit. Mentorships are unpaid and are considered a career exploration and preparation activity. Credit is given based on the length of the mentorship.

### **FOUR-YEAR EDUCATIONAL PLAN**

Students entering Wiscasset Middle High School will develop a four-year educational plan that will lead them to a broad career field and meet graduation requirements. This plan will be reviewed and updated annually in advisor time.

A four-year plan is essential. Developing and revising a four-year course selection plan each year will help students...

- Define and develop interests
- Ensure proper preparation for admission to post-secondary educational institutions
- Take full advantage of course offerings from all departments
- Gain as many skills as possible while still in high school
- Utilize special program opportunities
- Focus on a career direction

### **Career Pathways**

The following career pathways provide models of four-year course sequences in high school. By meeting Wiscasset Middle High School's graduation requirements, students should be "college ready" upon graduation. In order to meet the college admissions requirements at four-year colleges, students must exceed graduation requirements in the following areas: mathematics must include Algebra II and foreign language must have at least 2 years of study of the same language. The WMHS School Counselor will gladly work with students on their individual plan of study given their strengths, needs, interests, outside responsibilities and career goals. (The plans below are based on the requirements for the Class of 2021 and beyond.)

## Engineering, Science, & Technology Professional (4-year college)

Examples of Related Careers:

Architect	Electrical Engineer	Physician
Biochemist	Game Designer	Pilot
Ship's Captain	Statistician	Marine Biologist

### 4 Year Engineering, Science and Technology Professional Example (4-Year College)

Grade 9	Grade 10	Grade 11	Grade 12
CP Facing Challenge in Lit A/B Honors Facing Challenge in Lit A/B	CP Exploring Identity in Lit A/B Honors Exploring Identity in Lit A/B	CP English 11 A/B AP English Language Comp or Literature	CP English 12 A/B AP Literature or Language
CP Algebra I A/B Honors Algebra I Honors Algebra II	CP Algebra II A/B Honors Algebra II Honors Geometry	CP Geometry A/B Honors Geometry Honors Pre-calculus A/B	Honors Pre-Calculus A/B Honors Pre-Calculus A/B Honors Calculus A/B
World Cultures A/B Honors World Cultures A/B	Honors Modern Western Civ I & II	American History A/B AP US History	Principles of Democracy A/B
1 <sup>st</sup> Year World Language	2 <sup>nd</sup> Year World Language	3 <sup>rd</sup> Year World Language or Specialty Elective	4 <sup>th</sup> Year World Language or Specialty Elective
Integrated Science A/B Honors Integrated Science A/B	Biology A/B Honors Biology A/B	CP Chemistry A/B Honors Chemistry A/B Honors Physics A/B AP Biology	CP Physics A/B Honors Physics A/B Science Elective AP Biology or Chemistry
Also take graduation requirements: PE 1, Foundations of Health, Performing or Fine Arts electives	Also take graduation requirements: PE 2, Health elective, Intro to Engineering, Performing or Fine Arts, electives.	Take remaining graduation requirements.	Specialty elective

## Arts, Humanities, Health and Human Services Professional (4- year college)

Examples of Related Careers:

Commercial Artist	Nurse	Occupational Therapist
Teacher	Fashion Designer	Editor, Writer, Reporter
Social Worker	Accountant	Psychologist
Police	Actor	Athletic Trainer

### 4 Year Arts, Humanities, Health and Human Services Professional Plan

Grade 9	Grade 10	Grade 11	Grade 12
CP Facing Challenge in Lit A/B Honors Facing Challenge in Lit A/B	CP Exploring Identity in Lit A/B Honors Exploring Identity in Lit A/B	CP English 11 A/B AP English Language Comp or Literature	CP English 12 A/B AP Literature or Language
Pre-Algebra A/B CP Algebra I A/B Honors Algebra I A/B Honors Algebra II A/B	CP Algebra I A/B CP Algebra II A/B Honors Algebra II A/B Honors Geometry A/B	CP Algebra II A/B CP Geometry A/B Honors Geometry A/B Honors Pre-Calculus	CP Geometry A/B Math experience Honors Pre-Calculus A/B Honors Calculus A/B

World Cultures A/B Honors World Cultures A/B	Honors Modern Western Civ I & II	American History A/B AP US History	Principles of Democracy A/B
1 <sup>st</sup> Year World Language	2 <sup>nd</sup> Year World Language	3 <sup>rd</sup> Year World Language or Specialty Elective	4 <sup>th</sup> Year World Language or Specialty Elective
Integrated Science A/B Honors Integrated Science A/B	Biology A/B Honors Biology A/B	CP Chemistry A/B Honors Chemistry A/B Honors Physics A/B	CP Physics A/B Honors Physics A/B Honors Chemistry A/B Science Elective
Also take graduation requirements: PE 1, Foundations of Health, Performing or Fine Arts, electives	Also take graduation requirements: PE 2, Health elective & Intro to Engineering.	Take remaining graduation requirements.	Specialty electives

### Engineering, Science and Technology Technical (2-year College or Certificate Program)

Examples of Related Careers:

Diesel Engine Mechanic	Construction Manager	Electrician
Computer Repair Technician	Research Lab Technician	Website Developer
Engineering Technician	Welder	Composites Technician

### 2 Year Engineering, Science and Technology Technical Plan

Grade 9	Grade 10	Grade 11	Grade 12
CP Facing Challenge in Lit A/B Facing Challenges in Lit Foundations A/B Read 180	CP Exploring Identity in Lit A/B Exploring Identity in Lit Foundations A/B	CP English 11 A/B English 11 A/B	CP English 12 A/B English 12 A/B
Pre-Algebra A/B CP Algebra I A/B	CP Algebra I A/B CP Algebra II A/B	Concepts of Algebra II A/B CP Geometry	CP Geometry A/B Math experience
World Cultures A/B	Specialty Elective	American History A/B	Problems of Democracy A/B
1 <sup>st</sup> Year World Language		Specialty Elective	Specialty Elective
Integrated Science A/B	Biology A/B	CP Chemistry A/B Chemistry (semester)	CP Physics A/B Physics (semester)
Also take graduation requirements: PE 1, Foundations of Health, Performing or Fine Arts electives,	Also take graduation requirements: PE 2, Health elective & Intro to Engineering.	Take any remaining graduation requirements.	Specialty elective

### Arts, Humanities, Health and Human Services Technical (2- year College or Certificate program)

Examples of Related Careers:

Horticulturist	Paramedic	Registered Cardiac Sonographer
Early Childhood Teacher	Restaurant Manager	Respiratory Therapist
Chef	Certified Nurse Assistant	Educational Technician

## 2 Year Arts, Humanities, Health and Human Services Technical Plan

Grade 9	Grade 10	Grade 11	Grade 12
CP Facing Challenge in Lit A/B Facing Challenge in Lit Foundations A/B Read 180	CP Exploring Identity in Lit A/B Exploring Identity in Lit Foundations A/B	CP English 11 A/B English 11 A/B	CP English 12 A/B English 12 A/B
Pre-Algebra CP Algebra I A/B	CP Algebra I A/B CP Algebra II A/B	Concepts of Algebra II A/B CP Geometry	CP Geometry A/B Math experience
World Cultures A/B	Specialty Elective	American History A/B	Principles of Democracy
1 <sup>st</sup> Year World Language		Specialty Elective	Specialty Elective
Integrated Science A/B	Biology A/B	CP Chemistry A/B Chemistry (semester)	CP Physics A/B Physics (semester)
Also take graduation requirements: PE 1, Foundations of Health,, Performing or Fine Arts, electives	Also take graduation requirements: PE 2, Health elective & Intro to Engineering.	Take any remaining graduation requirements.	Specialty elective

### Bath Regional Career and Technical Center Pathway (2 year College or Certificate Program)

Course selection is very important in order for students to access Bath Regional Career & Technical Center (BRCTC) for their two-year course sequence. The first-year BRCTC students typically attend the morning session and can access 3 classes at WMHS. Second-year students attend the afternoon session and can access 3 classes in the morning. Please note: some BRCTC programs are a one-year commitment and students do not have to take both years of the program in order to attend. It is recommended for students to complete as many graduation requirements as possible before attending BRCTC. Students must complete an application to attend BRCTC and should visit the program before attending. The school counselor will gladly meet with prospective students about their course selections and available programming. If students have failed requirements or wish to access BRCTC sophomore year, he or she should speak to the school counselor about the feasibility of his or her plan.

Grade 9	Grade 10	Grade 11	Grade 12
CP Facing Challenge in Lit A/B Facing Challenges in Lit Foundations A/B Read 180	CP Exploring Identity in Lit A/B Exploring Identity in Lit AB Foundations	CP English 11 A/B English 11 A/B	CP English 12 A/B English 12 A/B
Pre-Algebra CP Algebra I A/B	CP Algebra I A/B CP Algebra II A/B	Concepts of Algebra II A/B CP Geometry A/B	CP Geometry A/B Take a Math experience through science class
World Cultures A/B		American History A/B	Principles of Democracy
	1 <sup>st</sup> Year World Language	BRCTC Program 1 <sup>st</sup> Year 4.0 Credits	BRCTC Program 2 <sup>nd</sup> Year 4.0 Credits
Integrated Science A/B	Biology A/B	BRCTC counts as a science experience.	Physical Science that also counts toward math experience.

Also take graduation requirements: PE 1, Foundations of Health, a Performing or Fine Arts Elective, Intro to Engineering	Take graduation requirements: PE 2, Health elective and a Performing or Fine Arts Elective,		
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### Academic Requirements for Post-Secondary Admission

• **Seniors' Achievements:** All schools request end-of-year grades. Some schools have withdrawn acceptances because of poor performance and a limited course load in the second semester. Seniors are encouraged to continue to take challenging and demanding courses as well as use the time to explore new subject areas.

So what should students keep in mind as they begin their high school careers? Students planning to continue their education in a college program should keep in mind the following considerations:

- **Challenge yourself.** Students are encouraged to take classes that challenge their academic capabilities. Colleges are concerned about grades, but also look closely at the courses the student completed to evaluate the overall rigor of the student's program.
- **Keep your options open.** Students considering four-year colleges are recommended to exceed the high school graduation requirements and take four years of mathematics, four years of science, three/four years of social studies, a minimum of two years of the same foreign language, and elective courses that will help students explore their interests. Many selective colleges expect students to have advanced math skills, i.e. pre-calculus, and to have completed at least three years of the same foreign language. Students considering two-year colleges will need to demonstrate strong math skills and competency in reading and writing. Many two and four-year colleges require that students complete placement exams prior to acceptance into a degree program if they have not demonstrated proficiency on a standardized test such as the SAT or ACT. While some colleges do not require these tests for admission, they may accept scores for placement into a college curriculum.
- **Develop an academic plan to meet your goals.** Your school guidance counselor and advisors are available to meet with students at each grade level to map out an academic plan for your high school program. Students/parents are encouraged to talk with the school counselor to learn more about college admissions requirements, courses recommended for specific majors and resources available in the guidance office to help students investigate their interests. The good news is... post-secondary is for everyone!!! Admission requirements vary from school to school. The school counselor and advisors will facilitate the search process with students and parents. It is important to plan ahead, since many of the requirements, such as math, need a sequential foundation. But rest assured—if you want to continue your education (and increase your earning potential) then we will work to help you find your perfect fit for life after Wiscasset Middle High School!
- What are schools looking for? The following are some of the criteria used (not necessarily in order):
- **Academic Record (Transcript):** Most important is the student's academic record since the ninth grade, with special emphasis on junior and senior years. Consideration is given to the level of difficulty of courses taken, academic performance within those courses, and the student's overall grade point average.
- **College Admission Tests:** The SAT reasoning test or the ACT (American College Test) is required by most, but not all, four-year colleges and many two-year schools. The SAT reasoning exams are generally taken in the spring of the junior year and the fall of the senior year. Test dates and application forms are available in the Guidance Department.
- **Letters of Recommendation:** From teachers, school counselor, employer.

- **Co-Curricular Activities:** Schools are looking for involved students. They are looking for students to be active and strong participants in one or two areas rather than superficial participators in many activities.
- **Eligibility requirements:** Students who have completed all the classes they require. It's important to review these requirements junior year for senior year course selection.

**Military**

If college isn't for you, there are other paths to take. Some students may wish to research careers in the military where they will, at the same time, be honorably serving their country. The Guidance staff can help students make connections with appropriate military personnel as a first step toward investigating a military career. Ongoing visits between students and recruiter personnel may occur in the guidance office throughout the school year as student schedules permit.

**2019-2020 PLANNING TEMPLATE**

Fall 2018			Spring 2019		
Course	Requirement	Credits	Course	Requirement	Credits
<b>Total Credits</b>			<b>Total Credits</b>		



## **COURSE OFFERINGS 2019 - 2020**

### **CONSUMER ECONOMICS**

#### **CONSUMER ECONOMICS**

**Course # 1400  
One Semester .6 Credit**

Consumer Economics is **required for graduation for the Classes 2020**. Class standards can be completed by enrolling in Financial Math A or B.

### **ENGLISH**

#### **READ 180 A/B**

**Course #1666 & #1667  
One Semester .6 Credit**

Read 180 is a reading intervention program for 9th-10th grade students who need more emphasis on fundamental skill development in order to be successful in high school and move toward or reach grade-level proficiency. Placement is based on NWEA testing, NECAP testing, Lexile scores, and teacher recommendations. Each class period is organized around three small group rotations: individualized computer software instruction; independent reading; and small group instruction in specific reading and writing skills. This class is heterogeneously grouped for grades 9-10. In some instances juniors may be added to the 9-10 grouping. The standards that are aligned in this course are based on where the student is in his/her learning progression. This course is nationally known for helping students improve their reading and writing skills.

#### **FACING CHALLENGE AS SEEN THROUGH LITERATURE (9/10 English):**

**One Semester .6 Credit**

This course is designed for a mixed group of freshmen and sophomores and delves into the idea of facing obstacles of various kinds, the means by which they are faced and includes analysis of the outcomes. Human nature in the face of challenge will be explored through the analysis of literature from various genres including novels, poetry, short stories, plays, and nonfiction. Students will participate in literary analysis and critical thinking activities in relation to abstract thematic ideas. Skills in the areas of writing, grammar, and vocabulary will also be addressed.

Offered at two levels:

#### **HONORS**

**Course #1643 & 1644**

The expectation at this level is that students will be independent learners with strong skills in comprehension, analysis and written language, who can handle a fairly brisk pace of curriculum delivery. **Students must register for both semesters.**

**COLLEGE PREP**

**Course #1639 & 1640**

The expectation at this level is that students should be able to self-manage with support and have average skills in comprehension, analysis and written language. **Students must register for both semesters.**

**COLLEGE PREP ENGLISH 11 A/B:**

**Course #1668 & 1669  
One Semester .6 Credit**

College Preparatory English 11A/11B is a survey program of American literature, which includes writing from the first settlements to the 20th Century. The course emphasizes basic skills such as analysis and interpretation of nonfiction, fiction, and poetry, writing for a variety of purposes and audiences, research and oral presentation. The expectation at this level is that students will be independent learners with strong skills in comprehension, analysis, and written language, who can handle a fairly brisk pace of curriculum delivery. **Students must register for both semesters.**

**ADVANCED PLACEMENT® LANGUAGE AND COMPOSITION 11/12 (offered 2019-2020)**

**Course # 1635  
Full Year 1.2 Credit**

This course is designed to provide the accelerated 11th and 12th English student with the intellectual challenges and workload consistent with a typical college/university English class. The class contains more reading and writing than the honors English class and stresses critical application of skills from non-fictional texts. Guidance and preparation for the Advanced Placement exam will be a large component of the class. Extensive outside reading and lengthy critical research paper will be required as well completion of a summer reading list to be handed out in the spring before the course. This course will be offered on an alternating basis with Advanced Placement Literature and Comp. This course will be offered on school years which begin with an odd number.

**ADVANCED PLACEMENT® LITERATURE AND COMPOSITION 11/12 (offered 2020-2021)**

**Course # 1636  
One Semester .6 Credit**

This course is designed to provide the accelerated 11th and 12th English student with the intellectual challenges and workload consistent with a typical college/university English class. The class contains more reading and writing than the honors English class and stresses critical application of skills to works of recognized literary merit. Guidance and preparation for the Advanced Placement exam will be a large component of the class. Extensive outside reading and lengthy critical research paper will be required as well completion of a summer reading list to be handed out in the spring before the course. This course will be offered on an alternating basis with Advanced Placement Language and Comp. This course will be offered on school years which begin with an even number.

**COLLEGE PREP ENGLISH 12**

**Course #1620 & #1621  
One Semester .6 Credit**

This course is designed to meet the needs of students planning to pursue English courses in a four-year college setting. Major emphasis will be placed upon independently reading and analyzing challenging



pieces of literature. Writing and revision will be a primary focus. In addition to a number of short analytical papers, a ten-page research paper is required. **Students must register for both semesters.**

## **HEALTH AND PHYSICAL EDUCATION**

Students in the Class of 2020 and above are required to earn 2.5\* credits in physical education and health. Students must take PE 1: *Foundations of Physical Education*, three physical education electives, and *Health 1: Foundations of Health Education* (**Starting with the class of 2021, students are required to take 1 year of PE and 1 year of Health. Students will take PE 1, PE2, HEALTH 1 and one health elective**). These are all semester courses that provide .6 credit each. Those students in need of PE credit to meet the graduation requirement will be given scheduling priority. Remaining class openings will be available to students who wish to include PE in their schedule as an elective.

### **HEALTH 1: FOUNDATIONS OF HEALTH EDUCATION**

**Course #2106  
One Semester .6 Credit**

The goal of the health education program is to provide students with the knowledge and skills needed to adopt and maintain healthy lifestyles. In this course, students will learn, practice, and be assessed on the health skills of accessing information, analyzing influences, and communication. Students will explore content in all areas of health and wellness with a focus on nutrition basics, mental health, first-aid/CPR/safety, and human growth and development.

## **HEALTH EDUCATION ELECTIVES**

### **NUTRITION AND WELLNESS**

**Course # 2120  
One Semester .6 Credit**

In this course students will learn, practice, and be assessed on the skills of decision-making, self-management, goal-setting, and advocacy. The focus of the content will be on physical health and nutrition. Students will explore how fueling our bodies with healthy foods will improve our overall health and well-being. Students will learn about nutrition and nutrients, healthy diets, and meal planning. Students will analyze their own eating habits and set goals to improve. Students will get the opportunity to practice basic cooking skills and learn how to plan/prepare healthy recipes.

**Prerequisite:** Successful completion of *Health 1: Foundations of Health Education*.

### **HEALTHY CHOICES**

**Course # 2121  
One Semester .6 Credit**

In this course students will learn, practice, and be assessed on the skills of decision-making, self-management, goal-setting, and advocacy. Students will expand their knowledge in a variety of health related topics such as sexual health, substance use, and mental health. Students will work to promote health in these areas, as well as focus on preventing diseases and other health problems. This course will focus on skills and strategies to avoid drug use as well as ways to get help for self or others. A variety of sexual health topics will be explored, including healthy relationships, prevention of STDs and unplanned pregnancy, and fetal development.

**Prerequisite:** Successful completion of *Health 1: Foundations of Health Education*.

## **WOMEN'S HEALTH**

**Course # TBD**  
**One Semester .6 Credit**

In this course students will learn, practice, and be assessed on the skills of decision-making, self-management, goal-setting, and advocacy. The focus of the content will cover physical, mental, social, and emotional aspects of women's health. Students will explore mental health topics such as stress management, body image, and self esteem. Students will participate in mindfulness activities, yoga, and explore other ways to stay physically and mentally healthy through fitness. Students will set personal goals and explore ways to improve their health through lifestyle choices. Students will also learn more about the human life cycle including reproduction, pregnancy, parenting, and human development.

**Prerequisite:** Successful completion of *Health 1: Foundations of Health Education*.

## **PHYSICAL EDUCATION**

### **PE 1: FOUNDATIONS OF FITNESS AND LEADERSHIP**

**Course #2119**  
**One Semester .6 Credit**

The focus of this course is to teach students the basic principles and concepts of physical fitness and how to apply them to a personal fitness program. Additionally, students will learn how to effectively communicate, problem solve (individually and in a group setting), cooperate, and take the leadership role. These skills will be addressed through in class exercise and a basic introduction to weight training. This course also includes lectures, discussions, and assessments on the benefits of exercise and the problems associated with inactivity, basic nutrition for a healthy lifestyle, principles of health-related physical fitness, and accomplishing fitness and health goals, as well as basic human anatomy through muscle identification. Students will develop the basic knowledge and concepts of belaying, climbing, and knot tying and be exposed to outdoor activities. The students will develop all of these skills by participating in team building activities, low rope elements and high rope elements. This course was formerly named Foundations of PE.

### **PE 2: LIFELONG FITNESS**

**Course #TBD**  
**One Semester .6 Credit**

The primary emphasis of this course will be for students to develop enjoyment in fitness through a variety of sports, games and activities. The students will develop skills through individual and team sports. Participants will be involved in all areas of the course including planning, teaching, monitoring, and participating in each specific sport. The focus of this course will be for students to develop basic skills for a variety of sports. The students will develop skills through participation and self/peer assessments. The sports included in this course are: tennis, badminton, pickleball, ping pong, frisbee golf, volleyball, handball, floor hockey, ultimate frisbee, soccer, and weight training. Students will continue to explore the relationship between fitness and its application to a healthy lifestyle through individual fitness and health. This class can be repeated once. **Prerequisite:** Successful completion of *PE 1: Foundations of Fitness and Leadership*

## JOBS FOR MAINE'S GRADUATES (JMG) PROGRAM

### 9<sup>TH</sup> GRADE JOBS FOR MAINE'S GRADUATES

Course #101  
Full Year 1.2 credits

This JMG course will act as a transition course, providing resources and knowledge to ensure JMG students from the 8th grade program are making a positive transition into high school. Throughout the year, students will be completing Jobs for America's Graduates Multi-Year Standards.

### 10<sup>TH</sup> GRADE JOBS FOR MAINE'S GRADUATES

Course #0029  
Full Year 1.2 Credits

This JMG course will be a direct continuation for the JMG 9th grade course, building on the foundation that was established during that year, but focusing more on career aspirations and potential pathways for the future. Other Jobs for America's Graduates Multi Year Standards will be addressed during this year.

## SOCIAL STUDIES

There are three required courses in the Social Studies Department for the classes of 2019-2022.

- o World Cultures
- o American History
- o Principles of Democracy

The department also offers several elective courses on a rotating basis. **While Honors Modern Western Civilization I & II is not a required course for graduation, the department strongly recommends this course to any student planning on attending a four-year college.**

### **Pathways:**

The Social Studies Department recommends the following paths for students to complete their social studies requirements:

#### Traditional Path:

- 9<sup>th</sup> Grade: World Cultures (Honors option available)
- 10<sup>th</sup> Grade: Social Studies Electives
- 11<sup>th</sup> Grade: American History (Advanced Placement option available)
- 12<sup>th</sup> Grade: Problems of Democracy

#### Competitive College Path:

- 9<sup>th</sup> Grade: Honors World Cultures
- 10<sup>th</sup> Grade: Honors Modern Western Civilizations
- 11<sup>th</sup> Grade: Advanced Placement American History
- 12<sup>th</sup> Grade: Problems of Democracy & Social Studies Electives

Variations on these paths should be designed with the assistance of social studies teachers and the Guidance Department to best meet the needs of each individual student.

## **WORLD CULTURES A/B College Prep**

**Course #2322 & 2323  
One Semester .6 Credit**

All ninth grade students take World Cultures. The course emphasizes the elements common to all cultures; the role geography and climate play in the development of culture and civilization, and the causes and effects of events and developments in history and the present day. In addition, there are many specific skills stressed in the general areas of writing, vocabulary, research, reading, speaking, listening, geography, chronology, and organization. The course explores cultures from Asia, Africa, Europe, Latin America, and the Middle East. Most incoming freshmen will take course. Students in World Cultures are expected to self-manage with support and have average skills in comprehension, analysis and written language.

## **HONORS WORLD CULTURES A/B**

**Course #2313 & 2314  
One Semester .6 Credit**

The same topics and skill areas as World Cultures will be addressed, but students will be reading some complex texts independently at a higher reading level and moving through curriculum delivery at fairly brisk pace. Honors students need a willingness to take intellectual and emotional risks. There will be a particular emphasis on research skills, analysis and formal writing and presentation that will provide an important base for future honors work in social studies. **Prerequisite: Teacher Recommendation**

## **HONORS MODERN WESTERN CIVILIZATION I**

**Course #2304  
One Semester .6 Credit**

This is a 1/2-credit course for college-bound sophomores, juniors or seniors that provides an important foundation in history, culture and literature. This course will be demanding in terms of reading and writing and will cover many topics. The focus for MWC I is an understanding of the movements and events that have shaped the modern world from ancient Greece through the Enlightenment with a special focus on the Renaissance. Current event discussions help connect the issues of the past with the conditions of the present. Geography is stressed throughout. Course materials include a basic history text as well as supplemental readings. **Prerequisite: Teacher Permission**

## **HONORS MODERN WESTERN CIVILIZATIONS II**

**Course #2305  
One Semester .6 Credit**

This is a 1/2-credit course for college-bound sophomores, juniors or seniors that provides an important foundation in history, cultures and literature. This course will be demanding in terms of reading and writing and will cover many topics. The focus for MWC II is an understanding of the movements and events that have shaped the modern world from the Enlightenment through the Russian Revolution. Current event discussions help connect the issues of the past with the conditions of the present. Geography is stressed throughout. Course materials include a basic history text as well as supplemental readings. **Prerequisite: Teacher Permission**

## **AMERICAN HISTORY A/B**

**Course A #2315/ B #2316  
One Semester .6 Credit**

This course focuses on the study of American history using a humanities approach. In addition, the class emphasizes specific skills in the areas of writing, vocabulary, research, reading, speaking, listening, geography, chronology, and organization. This course attempts to give students an understanding of the development of their country and its culture. American History focuses on United States history from the

Civil War to the modern era, covering the following topics: the Constitution, the Civil War and Reconstruction, industrialization, American imperialism, WWI, the Roaring 20s, the Great Depression, WWII, the post-war era, the civil rights movement, the Vietnam War, modern topics.

**A.P.® UNITED STATES HISTORY**

**Course #2317  
Full Year 1.2 Credits**

Advanced Placement American History takes students from Columbus to Obama emphasizing academic rigor, intellectual curiosity, individual commitment to class culture, and a willingness to take intellectual and emotional risks. Students who challenge themselves with advanced placement will develop skills in analysis, formal writing and presentation. Students should expect a greater amount of reading and writing outside of class. They will be responsible for contributing to a rigorous classroom culture where inquiry, effort and excellence pervade. Advanced placement students will be strongly encouraged to take the AP exam in May. **Prerequisite: Teacher Permission**

**PRINCIPLES OF DEMOCRACY A/B**

**Course #2318 & 2319  
One Semester .6 Credit**

**Successful completion of Principles of Democracy is required for all seniors.** It includes an introduction to our government and an in-depth study of the U.S. Constitution and the amendments. An appreciation of American freedoms, rights and responsibilities is emphasized. The study of current events and political geography is included. Basic economics concepts are studied as well. The goal of the course is to have students become aware of the world, appreciative of their heritage and ready to participate and contribute to our society as responsible adults.

**SOCIAL STUDIES ELECTIVES**

The Social Studies Department offers a variety of electives taught in a regular rotation. Three electives are offered each year. The courses rotate on a three-year cycle. Electives are recommended for grades 10-12.

**2019-2020**

Debate  
WWII & The Holocaust

**2020-2021**

Sociology  
Election 2020

**2021-2022**

Maine Studies  
American Pop Culture

**DEBATE**

**Course #2321  
One Semester .6 Credit**

Like to argue? Interested in everything? This elective is a great opportunity to hone your skills in argumentation. The course will focus on Public Forum and Lincoln-Douglas Debate formats, with some "impromptu" debating thrown in as well. Besides being tremendous fun, debate is an excellent way to improve your skills in research, essay writing, public speaking and logical analysis. Course will be open to sophomores, juniors and seniors.

## **WORLD WAR II & THE HOLOCAUST**

**Course # 2309  
One Semester .6 Credit**

This course is a semester long course, which will focus on the causes, the participants, the events and the results of World War II. Additionally, students will examine the Holocaust and the fundamental questions raised by this horrific event. Depending on the interest of students enrolled the emphasis of the course may be more heavily placed on the war itself or the Holocaust. Students will have the opportunity to examine in detail events of the war through literature, primary source documents, videos, discussion and debate. **The course will be open to sophomores, juniors, and seniors.**

## **TOPICS IN SOCIAL STUDIES**

**Course # 2352  
One semester .6 Credit**

This elective allows students to explore areas of interest and/or topics that are current in the news. The course focuses on developing students' independent research and writing skills. There is tremendous room for students to creatively explore topics in-depth and to experiment with social studies techniques for investigation and presentation. Course will be open to sophomores, juniors and seniors.

## **ELECTION 2020**

**Course #TBD  
One semester .6 Credit**

We are living in extraordinary times! From the rise of ISIS in the Middle East to health care and immigration reform at home; Republican and Democratic candidates for president have very different views on these issues and will likely take the country in two very different directions. Who Americans elect is sure to have a lasting impact on all of our lives. In this course we will follow the election closely, getting to know the candidates and the issues facing our country. We will follow and analyze polls while learning about campaign finance and strategy. Take this elective and become an expert on the race for the White House!

## **AMERICAN POP CULTURE**

**Course #2366  
One Semester .6 Credit**

American Pop Culture can be described in both historical and current terms. We will dive into both past and present examples of popular culture which span from entertainment, sports, news & advertisements, politics, and fashion to cyberculture, social media, video games and internet memes. We will watch movies, listen to music, read comic books, examine social media, and talk to older folks about what was cool when they were young. We will examine many existing examples at the start of the semester, and will finish up by creating our own examples of popular culture as 'trends' of our own.

## **MAINE STUDIES**

**Course #2367  
One semester .6 Credit**

Who are we, and how did we get here? We are shipbuilders, fisherman, farmers and foresters. We are politically independent, self sufficient and rugged individuals. We are Mainers! And this class examines how we came to be. Working closely with the Lincoln County Historical Society, students can expect to get out of the classroom and into the community. In this class students work as apprentice historians to learn all about Maine's rich, local history.

## **STEM (Science, Technology, Engineering & Mathematics)**

### **SCIENCE**

Students in the classes of 2020 must complete three year-long courses in Science, with all students required to complete Integrated Science and Biology. While WMHS has a graduation requirement of three core credits in science, it is strongly recommended that students pursuing college complete four full credits in science. After successful completion of these core courses, students may proceed into the upper division electives: Anatomy & Physiology, AP® Biology or AP® Chemistry. Other electives including Forensic Science, Marine Science, Astronomy, and Unmanned Aerial Vehicles may be taken prior to completion of the core sciences.

#### **Class of 2021 and Beyond**

Must demonstrate proficiency of the 8 standards within each of 4 content areas:

- Earth and Space Science
- Life Science
- Physical Science
- Engineering

#### **Traditional Pathway**

- Integrated Science (Earth Systems and Space Science)
- Biology (Life Science)
- Chemistry OR Physics (Physical Science)
- Intro to Engineering (Engineering)

#### **College Prep Pathway**

- Integrated Science
- Biology
- Chemistry (CP or Honors)
- Physics (CP or Honors)
- Intro to Engineering

*\*Students who are planning to attend a college after high school should be taking CP or Honors level courses. General Chemistry and General Physics are not recommended for college bound students.\**

#### **Career & Technical Pathway**

- Integrated Science
- Biology
- Intro to Engineering
- Choice of electives that cover **Physical Science Standards**

Chemistry	Marine Science
Physics	Astronomy
Forensics	Computer Science Principles

UAV

\*vocational programming will be assessed on individual basis

## ***Integrated Science***

### **INTEGRATED SCIENCE A/B**

**Course #2216 & 2217  
One Semester .6 Credit**

Integrated Science will introduce students to scientific concepts and techniques with an emphasis on Earth/Environmental and space science concepts. The course will examine the scientific method of measurement and the use of laboratory instruments. Students will explore units on the Earth's spheres (the water, the air and the solid Earth) and the Earth in space and how we use space platforms to study Earth.

### **HONORS INTEGRATED SCIENCE A/B**

**Course #2218 & 2219  
One Semester .6 Credit**

Honors Integrated Science will explore units on the Earth's spheres (water, air and solid earth) through an Earth System Science approach. The course will also examine the Earth in space and how we use space platforms to study Earth. The challenges of this course require a strong interest in science and desire to be challenged.

## ***Biology***

### **BIOLOGY A/B – CELLS AND CHEMISTRY OF LIFE**

**Course #2220 & #2221  
One Semester .6 Credit**

Biology A will focus on the microscopic view of life with an emphasis on biochemistry, cells, and the cellular processes that power life on earth. Biology B focuses on genetics, populations and ecological issues. In order to take Biology B students will need to have successfully passed Biology A. **Prerequisite: Successful Completion of Integrated Science.**

### **HONORS BIOLOGY A/B**

**Course #2222 & #2223  
One Semester .6 Credit**

This course is designed for students who have a strong interest and ability in the sciences. The fall semester will take a molecular approach to biology and will focus on the chemistry of life. Biology B focuses on genetics, populations and ecological issues. This is a rigorous course and as such students who wish to take Honors Biology must get permission from a science department instructor. **Prerequisite: Successful Completion of Integrated Science and instructor recommendation.**

## ***Chemistry***

### **GENERAL CHEMISTRY**

**Course #2204  
One Semester .6 Credit**

This course serves as a general introduction and quick survey of chemistry. It covers topics including matter, atomic structure, the periodic table, bonding and polymers. This is NOT an appropriate course for students planning to pursue post secondary studies in a four-year college. College-bound students should take full credit courses in both chemistry and physics. **Prerequisites: Successful completion of Integrated Science and Biology.**



### COLLEGE CHEMISTRY A/B

Course #2224 & #2225  
One Semester .6 Credit

This is a college preparatory course in the general concepts of chemistry. There is an emphasis on the application of math skills and on the process skills of science laboratory work. Chemistry A semester will focus on scientific measurement, atomic structure, the periodic table, and bonding. Chemistry B will explore many topics including chemical equations, energy changes, behavior of gases, and chemical behavior of the elements. **Prerequisites: Successful completion of Biology A & B and Algebra II. (Algebra II may be taken concurrently).**

### HONORS CHEMISTRY A/B

Course #2226 & #2227  
One Semester .6 Credit

**Honors Chemistry WILL be offered in the 2019-2020 school year and then in subsequent odd numbered academic years.**

This is a rigorous and challenging college preparatory class with an emphasis on critical thinking and problem solving. Topics covered in this class include atomic structure, chemical reactions, and stoichiometry. **Prerequisites: Successful completion of Biology A & B and Algebra II. (Algebra II may be taken concurrently) and instructor recommendation.**

## *Physics*

### GENERAL PHYSICS

Course #2207  
One Semester .6 Credit

This course serves as a general introduction and quick survey of physics designed to ensure that all students who graduate are exposed to NGSS in physics. Motion, Newton's laws, energy and momentum will be the main topics covered in this course. This is NOT an appropriate course for students planning to pursue post secondary studies in a four-year college. College bound students should take full-credit courses in both chemistry and physics. **Prerequisites: Successful Completion of Integrated Science and Biology**

### COLLEGE PHYSICS A/B

Course #2228 & #2229  
One Semester .6 Credit

This course is designed for college preparatory or vocational students who need a strong background in physics. The first semester of Physics will cover motion, vectors, Newton's laws and forces. The second semester of physics will cover work and energy, momentum and collisions, vibrations and waves and fission and fusion. Related lab work is included. **Prerequisites: Successful Completion of Biology, Geometry, Algebra II, or consent of instructor.**

### HONORS PHYSICS A/B

Course #2230 & #2231  
One Semester .6 Credit

**Honors Physics WILL be offered in the 2019-2020 school year and then again in subsequent even numbered academic years.**

This fast-paced physics course is designed for college preparatory students. It covers similar concepts as college physics and is taught as an Algebra-based course. **Prerequisites: Successful Completion of Biology, Geometry, and Algebra II, or consent of instructor.**

## **SCIENCE ELECTIVES**

### **ADVANCED PLACEMENT (AP®) BIOLOGY**

**Course #2236  
Full Year – 1.2 credits**

**AP® Biology is offered every other year. It will be offered in the 2020-2021 school year and subsequent even numbered academic years.**

This year long, one (1) credit course is designed to prepare students to take the Advanced Placement Exam in Biology. Topics include cellular form and function, taxonomy, respiration, photosynthesis, evolution, and ecology. **Students in this class will be expected to take the Advanced Placement Exam in May. Prerequisites: 3 core science courses.**

### **ADVANCED PLACEMENT (AP®) CHEMISTRY**

**Course #2232  
Full Year – 1.2 credits**

**AP® Chemistry is offered every other year. It will be offered for the 2019-2020 school year. It will run on academic years starting with odd numbers.**

This year long, one (1) credit course is designed to prepare students to take the Advanced Placement Exam in Chemistry. This is a very rigorous course that demands a lot of independent work outside of class. **Students in this class will be expected to take the Advanced Placement Exam in May. Prerequisites: 3 core science courses.**

### **ENVIRONMENTAL SCIENCE (AP Option)**

**Course #TBD  
Full Year- 1.2 credits**

The goal of this Environmental Science course is to provide you with the scientific principles and concepts required to understand the interrelationships of the natural world and to identify and analyze natural and human-made environmental problems. You will be asked to evaluate the risks associated with these problems and to examine alternative solutions for resolving and/or preventing them. Students will have the option of taking the AP exam at the end of the course. **Prerequisites: Completion of Biology and Algebra 1.**

### **ANATOMY & PHYSIOLOGY**

**Course #2237  
One Semester .6 Credit**

**Human Anatomy & Physiology is offered every other year. It will run on academic years starting with odd numbers.**

This course gives an introduction to Human anatomy and physiology. Topics include chemical and cellular organization, tissue level of organization, the integumentary system, the skeletal system, the muscular system, the nervous system, the endocrine system, the cardiovascular system, the lymphatic

system, the immune system, the respiratory system, the digestive system, the urinary system, and the reproductive system. An in-depth dissection is an essential component of this course.

**Prerequisites: 3 core science courses.**

### **FORENSIC SCIENCE**

**Course #2212  
One Semester .6 Credit**

Forensic Science is a half-credit course that focuses on practices and analysis of physical evidence found at crime scenes. The fundamental objective is to teach the basic processes and principles of scientific thinking and apply them to solving problems. Topics will include crime scene and trace evidence, criminal justice, fiber analysis, fingerprinting, DNA analysis, blood spatter, forensic anthropology, forensic entomology, and may include burn patterns and other topics as time permits.

**Prerequisite: Successful Completion of Integrated Science**

### **MARINE SCIENCE**

**Course #2213  
One Semester .6 Credit**

This course will examine physical and biological aspects of the marine environment, with emphasis on the Gulf of Maine. It will include concepts such as Gulf of Maine physical geography, marine weather, tides and currents, seawater chemistry, inter-tidal life and marine resource management. **Prerequisites: Successful completion of Integrated Science]**

### **ASTRONOMY**

**Course #2214  
One Semester .6 Credit**

This course will introduce students to the field of astronomy and space science. It will include a survey of the universe from our local solar system to the outer limits of the visible universe. Topics will include planetary science, star formation and life cycles, galaxy structures, and the evolution and fate of the universe. **[Prerequisites: Successful completion of Integrated Science]**

### **AP® COMPUTER SCIENCE PRINCIPLES**

**Course #2241  
Full Year 1.2 Credits**

The Computer Science Principles course introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. In this rigorous, full-year elective students will be introduced to a broad range of topics including coding, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. With a focus on creative problem solving and real-world applications, the Computer Science Principles prepares students for college and career.

**Prerequisites: Algebra 1, Introduction to Engineering or instructor approval.**



## **TECHNOLOGY & ENGINEERING**

### ***TECHNOLOGY COURSES***

#### **UNMANNED AERIAL VEHICLES**

**Course #2234**

**One Semester .6 Credit**

UAV Academy is a course designed to introduce students to the world of UAV construction and piloting, as well as rules and regulations set by the FAA, the Federal Aviation Administration, which monitors and controls the airspace over North America. This class offers students exposure to several different aspects regarding UAVs, such as the computer and mechanical engineering that goes into building a device capable of stable, controllable flight; experience piloting a UAV, like a quadcopter (a UAV with four propellers); and limitations set forth by the FAA. UAV use is widespread across the country, and commercialization of UAVs being used by average citizens is just around the corner, providing a new, booming industry for those trained and experienced in this field. Enroll in UAV Academy now and let your education, and future, take flight.

#### **AQUATIC ROVs (Sea Perch)**

**Course #2243**

**One semester .6 credit**

The Aquatic ROV/SeaPerch course is an innovative underwater robotics program that teaches basic engineering and science concepts with a marine engineering theme. This is a project-based course in which students will build an underwater remotely operated vehicle (ROV) while learning basic skills in ship and submarine design and exploring naval architecture and marine engineering principles.

#### **ROBOTICS for grades 11 and 12**

**Course # 2456**

**One semester .6 credit**

Students will design and build a mobile robot to play a sport-like game. During this process they will learn key STEM principles, and robotics concepts. At the culmination of this class, they will compete to complete a variety of challenges. This modular and project-based curriculum teaches the design process in an engaging, hands-on manner to help teachers challenge, motivate, and inspire their students. By moving students through an actual engineering project, students quickly understand the relevance of what they are learning. **This course is open to juniors and seniors only.**

### ***ENGINEERING COURSES***

#### **INTRODUCTION TO ENGINEERING (Engineering 1)**

**Course #2240**

**Semester Class .6 credit**

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using modeling principles, and use an engineering notebook to document their work. This course is the foundational course for many of the technology and engineering course including Principles of Engineering and Computer Science Principles.

**PRINCIPLES OF ENGINEERING (Engineering 2)**

**Course #2242  
Semester Class .6 credit**

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. **Prerequisite:** Introduction to Engineering, **Suggested:** Algebra 1

**ADVANCED ENGINEERING SEMINAR**

**Course #2245  
Semester Class .6 credit**

This project based course will shift to meet student interest. Students will research and complete an individualized project that requires them to engage in the engineering design process. Possible topics include: Wind Energy, Guitar Building, and Metal Working. **This course is open to juniors and seniors.** **Prerequisites:** Introduction to Engineering, Principles of Engineering **Suggested:** Algebra 1

**MATHEMATICS**

The math department recommends the following pathways based on your 9th grade selection for the Class of 2021 and beyond:

9th grade: Pre-Algebra	CP Algebra 1	Honors Algebra I
10th grade: CP Algebra 1	CP Algebra II	Hon. Algebra II/ Pre-Calculus
11th grade: Concepts. of Algebra II	CP Geometry	Calculus
12th grade: CP Geometry	4th year experience	

***Algebra***

**PRE-ALGEBRA**

**Course #1816 & 1833  
One Semester .6 Credit**

This course offers foundational skills in Algebra. Topics covered include scientific notation, exponents and radicals, expressions, equations and inequalities. Students will also learn how to write and graph linear equations in slope intercept form. Reasoning, communication, and problem solving strategies are a major focus as well.

**CP ALGEBRA 1A /1B**

**Course #1817 & 1818  
One Semester .6 Credit**

Algebra 1 is the introduction of variables, constants, expressions and equations. Topics covered in Algebra 1A are: simplifying expressions, solving equations, the concept of a function. Students will also writing and graphing linear functions. In Algebra 1B students will solve and graph linear inequalities and solve systems of equations and inequalities. Students will also simplify radicals and will use laws of exponents to simplify expressions. NWEA score of 228 or above is recommended for this course.

**Algebra 1 is a required course and a prerequisite for further study of mathematics.**

### **HONORS ALGEBRA 1A/1B**

**Course #1825 & 1826  
One Semester .6 Credit**

Honors Algebra 1 is a faster pace math course and a more in depth study of topics covered in CP Algebra 1. Students should have strong math skills and teacher recommendation. A grade of an "A" in 8th grade math class is recommended for placement in this course.

### **CONCEPTS of ALGEBRA II A/B**

**Course # 1814 & TBD  
One Semester .6 Credit**

This course will focus on key concepts from Algebra II with an emphasis on factoring quadratic expressions. Students will become familiar with the concept of a function and function notation and will compare a variety of functions through their equations, tables and graphs. These will include quadratic, exponential and absolute value functions. Students will become familiar with the concept of a function and function notation. **Fulfills Algebra II requirement for Class of 2021 and beyond. Placement based on teacher recommendation.**

### **CP ALGEBRA II A/B**

**Course #1819 & 1820  
One Semester .6 Credit**

Algebra II will review the procedures learned Algebra 1 and in Algebra IIA students will be introduced to quadratic functions and factoring, complex numbers, polynomials and polynomial functions. Topics covered in Algebra IIB include exponential functions, rational exponents, radicals and summarizing, representing and interpreting data on a single count or measurement variable. **Algebra II is a required course for the class of 2021 and beyond.**

**Prerequisite: Successful completion of Algebra 1. Students should have earned a "C" or higher in Algebra 1.**

### **HONORS ALGEBRA II A/B**

**Course #1829 & 1830  
One Semester .6 Credit**

Honors Algebra 2 is a faster paced course than CP Algebra and with additional topics covered. It is expected that students have retained the skills learned in Algebra I as review of these skills will be limited. Additional topics covered include: rational functions and their graphs, graphs of radical functions and logarithms. **Prerequisite: Successful completion of Algebra I. Students should have earned a "B" or higher in Algebra I Honors or "A" in CP Algebra 1.**

## ***Financial Math***

### **FINANCIAL MATH A/B**

**Course #1821 & 1822  
One Semester .6 Credit**

Financial Math is an algebra based, applications oriented, technology rich course that uses algebra in a financial setting. This course also introduces students to selected topics from Algebra 2 and Pre-Calculus. Topics covered in Financial Math Part A are: banking services, consumer credit,

automobile ownership, and employment basics. In Financial Math Part B we cover independent living, preparing a budget, the stock market, and modeling a business. **Prerequisite: Successful completion of Algebra I.** This class will meet the Consumer Economics requirement for the Class of 2020.

## ***Geometry***

### **CP GEOMETRY A/B**

**Course #1823 & 1824  
One Semester .6 Credit**

Geometry is an understanding of the attributes and relationships of geometric objects that can be applied in diverse contexts. High school geometry focuses on plane Euclidean geometry. Topics covered in Geometry 1A are: Introduction to the points, lines and planes, geometric notation, attributes and properties of lines and angles, coordinate geometry, and transformations. In Geometry 1B, students learn more about the attributes and properties including similarities and congruence of triangles, properties and attributes of parallelograms, right triangle trigonometry, and geometric measurement and dimension. **Prerequisite: Successful completion of Algebra 1 and Algebra II.**

### **HONORS GEOMETRY A/B**

**Course #1827 & 1828  
One Semester .6 Credit**

Honors Geometry is a faster pace math course and a more in depth study of topics covered in CP Geometry. Students should have strong math skills and teacher recommendation. **Prerequisite: Successful completion of Algebra II. Students should have earned an “A” in CP Algebra II or “B” in Honors Algebra II.**

## ***Advanced Electives***

### **HONORS PRE-CALCULUS**

**Course # 1862  
Full year 1.2 Credits**

This course is designed to add depth and breadth to a student’s mathematical background before embarking on a study of the methods of calculus. The course covers a review of algebra, linear and quadratic functions; polynomial, rational, exponential, radical, and logarithmic functions; compositions and inverses of functions; theory of polynomials with the Fundamental Theorem of Algebra; trigonometric functions and identities; additional topics and applications.

**Prerequisite: Successful completion of Geometry and Algebra II (CP or Honors)**

### **HONORS CALCULUS I**

**Course # 1813  
Full year 1.2 Credits**

This course introduces the concepts of limit, continuity, differentiation and integration of algebraic, trigonometric, exponential, logarithmic, and inverse trigonometric functions of a single variable. Emphasis is placed on applications of the derivative and the integral using the rules of differentiation and integration. **Prerequisite: Successful completion of Honors Pre-Calculus.**

## **VISUAL AND PERFORMING ARTS**

At WMHS, we offer courses in Theatre, Visual Arts and Music. Students in the Class of 2020 need 1.5 credits in 2 of the 3 areas in order to graduate. Students in the Class 2021 and below will need to engage in one year of study to meet proficiency in the visual and performing arts standard in an art discipline of their choice (visual art, drama, or music).

### **MUSIC**

#### **CONCERT BAND A/B**

**Course #1900 & 1901  
One Semester .6 Credit**

Concert Band is offered to all students with at least 2 years of experience on their band instrument and with reading music. The band performs frequently at a variety of school and community events throughout the year. Rehearsals focus on skills needed to successfully perform selected music. Band students are strongly encouraged to practice. All band students also attend weekly Band Sectionals. Students who do not read music or play an instrument already are invited to contact the music teacher to discuss how they could become involved with Band.

#### **CONCERT CHOIR A/B**

**Course #1902 & 1903  
One Semester .6 Credit**

The Concert Choir is open to all students interested in singing, regardless of prior experience. The class focuses on proper vocal techniques and incorporates skills needed to read music. The music selection encompasses many cultures, styles and time periods. The chorus also performs frequently at school events, concerts and community events throughout the year. Chorus students also take part in weekly sectionals as scheduled.

#### **JAZZ BAND**

**Course # 1928  
One semester .6 Credit**

Jazz band is offered to any student with at least 3 years of prior experience reading music and playing a band instrument. (Students who have less experience and are interested in joining may see Ms. Brewer for special permission.) Students study different styles of jazz and learn skills specific to jazz performance. The jazz band performs often throughout the year.

### **THEATER ARTS**

#### **ACTING WORKSHOP**

**Course #1501  
One Semester .6 Credit**

Students will learn how an actor makes the progression from the written line to the performance. Nearly all class time will be used to analyze and build a character. Students of different levels of experience may participate in the same class. A public performance is a requirement in this class, and all students will take an active role in meeting this standard. There has been and could be still collaboration with the 7th Grade Drama class. All students are encouraged and welcome to join.

#### **ADVANCED ACTING**

**Course # TBD  
One Semester .6 Credit**

Students who have taken Acting Workshop may sign up for this class which will go further in depth of creating a believable character, more natural stage movement and more work on voice and diction. A



public performance is a requirement in this class with the possibility of a student-written performance. Offered only in the Spring semester.

**CHILDREN'S THEATER**

**Course # 1505  
One Semester .6 Credit**

Students will create a storyboard which can lead to the creation of a classroom script. This script will be practiced and all students will become active participants in a production with an audience (possibly classes from the Wiscasset Elementary School.) All students welcome.

**TECHNICAL THEATER DESIGN**

**Course # 1503  
One Semester .6 Credit**

Crucial aspects of the theatre include lighting, costumes, set construction, makeup and special effects will be considered through group and individual production designs. Students will be an active part of designing, building, and working on the set for the Fall Play or One Act Competition.

**STAGE EFFECTS**

**Course #TBD  
One Semester .6 Credit**

Critical aspects of this class include sound, stage lighting, and special effects. Students will have an active role in working behind the scenes during the Fall play. This class is offered only in the Fall semester and Tech Theatre Design is required.

**COSTUME CONSTRUCTION AND STAGE MAKEUP**

**Course #TBD  
One Semester .6 Credit**

Critical aspects of this class include some costume design, costume construction, and the application of believable theatre makeup. Students will have an active role in creating costumes for the One Act competition. Space is limited. This class is offered in the Spring semester only.

**CHILDREN'S THEATER**

**Course #1505  
One Semester .6 Credit**

Students will create a storyboard which can lead to the creation of a classroom script. This script will be practiced and all students will become an active participant in a production an audience (possibly classes from the primary school). All students are welcome.

**VISUAL ARTS**

Want to take art? Sign up for Studio Art and you will be placed in your level of study on your first day. Art at WMHS is a choice-based program, aligned to the Maine State Standards, whereby all high school level classes (Studio Art 1A through 4B and beyond) are open to all students in grades 9-12.

In each Studio Art class students may choose to pursue projects from a large number of art media types including:

**Drawing and painting  
Printmaking (including intaglio, relief, gelatin, collagraph and silk screen)**

**Traditional and digital photography**  
**Digital art and media arts (including animation, illustration, graphic design, 3D printing and videography)**  
**Paper making and paper arts,**  
**Fiber arts (including weaving, clothing design, felting)**  
**Collaging and multimedia projects**  
**Ceramics and sculpture (including clay, wood carving, stone carving, metals, mobiles, paper mache, and plastics)**  
**Installation (multi-media art similar to dioramas),**  
**Crafts (including stained glass, fused glass)**  
**Jewelry making (including copper enameling, fused glass, beading, found object assembly)**  
**Soap and candle making and more**

Artland media choices are based on availability and interest. Modified or full choice is dependent on class size and culture. By request and appropriateness, achievement at each level of study and media experience may be outlined in a transcript addendum letter to interested schools.

**STUDIO ART**

Studio Art A- Fall Semester **Course #1020**  
Studio Art B- Spring Semester **Course #1021**  
**One Semester .6 Credit**

**ADVANCED ART**

**Course # 1048**  
**Full Year 1.2 Credit**

**AP STUDIO ART**

**Course # TBD**  
**Full Year 1.2 Credit**

**ADVANCED STUDY AND ENRICHMENT OPPORTUNITIES:**

Seniors (and in special circumstances Juniors) who have completed a minimum of four (and five to six preferred) semesters of Studio Art and achieved requirements through Level 2b (and 3b preferred) and would like to engage in a full year of advanced art study, should speak with the Visual Arts teacher about enrolling in Advanced Art or AP Studio Art. AP Studio art requires summer work prior to enrollment and an average of 4-5 hours of out-of-class work weekly. Teacher/Student discussions prior to summer break are mandatory. Advanced Level Art Students work right alongside Levels 1a-4b.

Visual Arts programming also offers arts enrichment through the WMHS Gifted and Talented Program. Some students that meet the requirements may be invited to extend their arts class study with additional GT opportunities.



## **WORLD LANGUAGE**

*“Language and communication are at the heart of the human experience. The United States must educate students who are linguistically and culturally equipped to communicate successfully in a pluralistic American society and abroad. This imperative envisions a future in which all students will develop and maintain proficiency in English and at least one other language, modern or classical. Children who come to school from non-English backgrounds should also have opportunities to develop further proficiencies in their first language.”*

- American Council on the Teaching Foreign Languages - ACTFL

Wiscasset Middle High School provides students with the opportunity to obtain a strong foundation in language. Students may choose to pursue advanced levels in French and Spanish to enrich their experience.

Students who complete the first and second level of either French or Spanish fulfill college entrance requirements. Communicating with native speakers is the goal of levels 2 and above. Students taking a foreign language will have the opportunity to travel based on overall interest.

World Language Requirements: One credit of the same Foreign Language is required for graduation for the classes of 2019-2020.

### **WORLD LANGUAGE CULTURE & TOURISM**

**Course # 1763 & 1764**  
**One Semester .6 Credit**

The World Language Culture and Tourism class introduces students to the Francophone and the Hispanic world. Students engage in the study of culture in many countries of the world, with an emphasis on communication, connections, comparisons and communities. Students will receive ½ credit per semester, must have one semester of francophone world (½ credit) and one semester of hispanic world (½ credit).

Needs department approval.

### **FRENCH I AND SPANISH I**

**Course Spanish I A/B #1736 & 1737**  
**Course French I A/B #1748 & 1749**  
**One Semester .6 Credit**

French I and Spanish I introduce students to the target language with a study of vocabulary, cultural practices, and grammar. Francophone or Spanish/Hispanic cultures and history are introduced through readings, projects, and the study of the workings of the language itself. No prerequisites are required.

### **FRENCH II AND SPANISH II**

**Course Spanish II A/B #1738 & 1739**  
**Course French II A/B #1750 & 1751**  
**One Semester .6 Credit**

The level II of the target language builds on to level I. Students continue to expand their vocabulary and cultural knowledge. Students continue to increase their competency and proficiency through reading, writing, listening and speaking. Prerequisite is level I of the target language or department approval.

**FRENCH III AND SPANISH III**

**Course Spanish III A/B #1740 & 1741  
Course French III A/B #1752 & 1753  
One Semester .6 Credit**

The level III of the target language covers more sophisticated vocabulary, and expands on the structure of the language. Students continue to increase their competency and proficiency through reading, writing, listening and speaking. Prerequisite is successful completion of level II of the target language.

**FRENCH IV AND SPANISH IV**

**Course Spanish IV A/B/ # 1759 & 1560  
Course French IV A/B # 1761 & 1762  
One Semester .6 Credit**

The level IV will be structured around the following themes: contemporary life, families and communities, global challenges, science and technology, and beauty and aesthetics. These courses will be taught in French or Spanish. Students will engage in written, spoken and nonverbal communication. Students will synthesize information from a variety of authentic print, written, audio, visual, and audiovisual resources. The students are encouraged to take the Advanced Placement exam which is available in May of each year.

**BATH REGIONAL CAREER AND TECHNICAL CENTER**

The Bath Regional Career & Technical Center (BRCTC) is open to all students with priority given to juniors and seniors. Traditional vocational courses are offered to prepare graduates for a career after high school, as well as a growing mix of highly technical offerings that prepare students for community college or the university level. Most of the programs offer the ability to earn college credit while completing high school. For more detailed information about programs, check out the BRCTC website: <http://bath.maine.cte.org/>

**Articulation and Dual Enrollments**

As a student at Bath Regional Career and Technical Center, you will have an opportunity to work and learn at a college level and obtain college credits while still in high school. BRCTC provides opportunities to earn transferable college credits through Articulation Agreements and Dual Enrollments. Please refer to course descriptions for specific information.

WMHS awards 4 credits for each year students attend and pass BRCTC courses.

**AUTOMOTIVE TECHNOLOGY**

**(1<sup>st</sup> Year) Course # 2500  
(2<sup>nd</sup> Year) Course # 2501**

The Automotive Technology department offers foundational knowledge that is essential to a rewarding automotive career. The automotive world is changing at a rapid rate and is becoming very complex. The first year of Auto Technology will introduce students to the basic mechanical workings of the automobile. The program starts with safety and tools and fasteners. The remainder of the first year focuses on basic vehicle maintenance engines and brakes. Auto Technology II concentrates on electricity from Ohms law to the latest in computer controls. Students will be taught how to diagnose problems with the same

complex computer equipment used in the industry today. Please note that there is a good deal of reading and classroom instruction at various times in this program. •Articulation and concurrent enrollment credits available through SMCC and CMCC.

**CARPENTRY**

**(1<sup>st</sup> Year) Course# 2503**  
**(2<sup>nd</sup> Year) Course# 2504**

Carpentry introduces students to basic residential construction techniques through hands on application of theories taught in the classroom and applied in the construction of a modular home. Students will apply geometry and physics as well as learn to present themselves in a positive, professional manner. Math and reading skills are required for this course. At the conclusion of the two-year carpentry program, students will have the skills to enter the field of residential construction and/or continue their education at the Community College level with one credit earned through a dual enrollment with CMCC •Articulation and concurrent enrollment credits through CMCC.

**CULINARY ARTS I & II**

**(1<sup>st</sup> Year) Course # 2509**  
**(2<sup>nd</sup> Year) Course # 2510**

This is a fast paced, academically challenging, college prep program designed to help you be successful in a job or matriculate into a culinary school after high school. The American Culinary Federation standards will be taught along with ServSafe, a nationally recognized certification. Students will learn technical and employability skills for career and life management.

Culinary II provides students the opportunity to improve their knowledge and skills as they receive advanced instruction in Culinary Arts. Culinary II will incorporate reading and writing culinary related assignments as part of the coursework. •Articulation credits through CMCC, SMCC, Culinary Institutes of America, Johnson and Wales University. Enhanced articulation with Maine Community College System.

**EARLY CHILDHOOD OCCUPATIONS I & II**

**(1<sup>st</sup> Year) Course #2515**  
**(2<sup>nd</sup> Year) Course #2516**

Do you love to work with children? Do you have a creative side? Our Early Childhood Occupations class can give you the opportunity to learn about children and how they develop, learn and play by using hands-on experience. In this class, you will get experience reading to children, playing with children, planning activities, making healthy snacks and learning how to be a team player in a preschool setting.

The ECO morning program collaborates with RSU 1 Adult Education, running the early learning center for the Sail Into Literacy Program. In addition, we place students in the local Family Focus and Head Start settings to offer a variety of field site locations for students to learn and practice. Students will rotate through these placements throughout the year.

The ECO II program runs a three to five year old program three days a week. This program provides a preschool experience to local children by giving them an enriched classroom setting. During this second year, students' skills and knowledge will grow and the students will be prepared to continue their education or enter the workforce after graduation.

**ELECTRICAL TECHNOLOGY I & II**

**(Expected to be offered 2019-2020)**

**(1st Year)**

**Course #2523**

**(2nd Year)**

**Course #2524**

This two-year program provides the student with a foundation in both residential and commercial wiring. Students will learn basic electrical theory, how to install wiring systems in both residential and commercial applications using blueprints, and the National Electrical Code. Safety is a major focus of instruction and students will learn basic wiring techniques and how to use the tools necessary to install the different systems.

Real life application of electrical theory will be a daily component of the electrical program with many hands-on projects available for students to gain valuable experience. The class will wire the modular home constructed by the Carpentry program as well as participate in a variety of projects in the classroom and around the school. The students will also participate in live work out in the community, experiencing real-life electrical work on the job. Upon completion of two years in the program each student will receive a certificate stating that they have completed 576 hours of classroom time in Electrical Technology.

- Enhanced articulation with Maine Community College System

**ENGINEERING & ARCHITECTURAL DESIGN (1 year program)**

**Course #2540**

Are you interested in buildings, bridges, sustainability, and urban design? How about the design of furniture, jewelry, new product technology or other types of object innovation? This class is an opportunity to design and then test strength, dynamics, aesthetics, and function of your design ideas by building concept models, making technical drawings, and creating prototypes. Students will have the opportunity to explore careers related to architecture, engineering, and industrial design. Projects include live work opportunities and design & engineering competitions. We will use a variety of materials and methods, including physical model building, 3D solid modeling/3D printing, and digital Building Information Modeling. You will have the opportunity to learn design programs such as Autocad, Sketchup, Revit, and Rhino, and to use equipment such as 3D printers, laser cutter, power & hand tools to build models and prototypes.

**GRAPHIC DESIGN I & II**

**(1st Year)**

**Course #2538**

**(2nd Year)**

**Course #2539**

This two-year college prep program prepares students to design and produce a variety of print publications while exploring the techniques and employing Adobe Industry standards. Commercial Arts offers an introduction to digital imaging, photo manipulation and computer based art using Adobe Photoshop and Illustrator as students explore different avenues of visual communication, self expression, and creative problem solving. Students will learn graphic design principles, techniques and software as they experience career opportunities available to them through live work opportunities such as logo designs, advertising, and t-shirt designs. □•Articulation credits through SMCC and Concurrent Enrollment through CMCC.

**HEALTH SCIENCE CAREERS I & II**

**(1<sup>st</sup> Year)**

**Course # 2511**

**(2<sup>nd</sup> Year)**

**Course # 2512**

**CERTIFIED NURSES ASSISTANT (CNA) (1 year program)**

The CNA course is a one-year program available to juniors and seniors interested in a career in the

health field. Students receive 350 hours of academic preparation including classroom material and supporting lab practice. Instruction in all human body systems is designed for an understanding of each system and its relationship to the healthy or diseased body. Students will participate in a supervised clinical experience in local health care and extended living facilities. Students are required to apply their classroom lessons in completing actual patient assignments. Students are co-assigned with professional staff providing valuable assistance while they learn. The program also provides training and/or observation in hospital departments specific to each student's interest.

Successful students will be well prepared to take the State of Maine Certified Nursing Assistant exam in June. Graduates are readily employable at various healthcare facilities and well prepared for further health career training.

### **MEDICAL SCIENCE (1 year program)**

The Medical Science course is designed for students who are interested in pursuing a career in the medical field--doctor, nurse, physical therapist, occupational therapist, radiology/imaging, veterinarian, dietician, and others. All students will complete a concurrent enrollment with the Maine Community College system for Medical Terminology. The course integrates basic medical information, anatomy and physiology, medical terminology, integrated research projects, field trips to medical facilities, and skills labs. Students will earn CPR and First Aid Certifications.

•Concurrent enrollment credits available through Maine Community College System

### **WELDING AND METAL FABRICATION I & II**

**(1<sup>st</sup> Year)      Course #2529**  
**(2<sup>nd</sup> Year)      Course #2530**

Welding I introduces students to basic welding fabrication skills through hands on application in the shop. First year students will learn to correctly and safely set up and operate various power tools as well as cutting and welding equipment. The students will develop skills in the following topic areas:

- Welding Shop Safety
- Metallurgy
- Layout & Measurement Tools and Techniques
- Welding Symbols and Blueprint reading
- Welding Joints and Positions
- (SMAW) Shielded Metal Arc Welding (Stick)
- (GMAW) Gas Metal Arc Welding (Mig)
- Fabricate Various Projects □

Students will apply basic math and science skills during this course and learn to demonstrate positive and productive workplace behavior. Welding II students will continue to develop and apply the skills they have learned. Live work projects will be designed and built for customers using various welding and fabrication procedures. Advanced welding techniques will be taught and applied during this program including:

- (FCAW) Flux Core Arc Welding
- (GTAW) Gas Tungsten Arc Welding (TIG)
- (OFC) Oxygen Fuel Cutting
- (PAC) Plasma Arc Cutting □

By completing this two-year program, all students will be given the opportunity to develop the skills required to pass the American Welding Society (AWS) Limited Thickness, Structural Plate Test. This certification test will be provided at no cost to the students participating. As a Certified Welder, many career and PostSecondary Education opportunities are available. These opportunities are discussed and encouraged through participation in this class. □•Articulation credits through SMCC.

## **Applied Academics**

Applied Academics provides all Bath Regional Career and Technical students with academic support for their academic classes and their CTE programs. Students can visit during office hours or set up an appointment to meet with the instructor. In addition, BRCTC students may be eligible to earn academic credits with the recommendation of his or her guidance counselor and the permission of his or her sending school principal. Finally, the Applied Academics program supports all BRCTC programs through various initiatives, such as Accuplacer testing, resume writing workshops, and portfolio development.