

2023-2024

# PROGRAM OF STUDY GUIDE

# TABLE OF CONTENTS

<u>Description</u>	<u>Page</u>
School Profile	1
Making Course Selections	3
Graduation Requirements	3
Academic Course Assignment	4
Enrichment Programs	4
Dropping a Subject	4
Honor Roll Status	5
Scheduling Process	6
Support Services	6
Courses of Study:	
Art	7
Culinary Arts	8
English	9
Health and Physical Education	11
Mathematics	13
Modern World Language	15
Music	17
Science & Technology	19
Social Studies	25
Special Education Program	28
Pathways Program	30
Biddeford Regional Center of Technology	31
Graduation Requirement Checklist	32



Old Orchard Beach High School Profile 2021-2022 40 E. Emerson Cummings Blvd. Old Orchard Beach, Maine 04064

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http://rsu23.org CEEB Code: 200750

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## The School

Old Orchard Beach High School is a four-year public high school that serves approximately 220 students in grades 9-12 with a comprehensive academic curriculum. The school is accredited by the New England Association of Schools and Colleges (NEASC). In the mid 1990's, OOB High School was granted the distinction of National School of Excellence for its outstanding commitment to enhancing student learning and performance. The task of education at Old Orchard Beach High School is a responsibility shared by teachers. students, parents/guardians, administrators, staff, and the community. It is our mission and vision to ensure our students graduate as creative and practical problem solvers, clear and communicators, responsible collaborative citizens, integrative and informed thinkers, and reflective and dedicated learners.

## The Community

Old Orchard Beach is a suburban coastal community located just 12 miles south of Maine's largest city, Portland, and 90 miles north of Boston. Catering to tourists and families is a way of life in Old Orchard Beach, as tourism is the primary business of the community. It has a year round population of roughly 9,000 and expands in the summer to nearly 100,000. Proximity to Boston offers OOB citizens the opportunities of a large city experience while the neighboring cities of Biddeford, Saco, and Scarborough offer a variety of services and shopping.

## Graduation Requirements:

22 total credits are required for graduation

English	4	Soc, Studies	3.
Math	3	Science	3
Fine Arts	1	Phys Ed.	1
Health	.5	Electives	6.5
Community	y Servi	ce – 20 hours	
Senior Internship – 30 hours			

## Grading Scale

A+	98-100	B+ 92	C+ 84	D+76
Α	95-97	B 89-91	C 81-83	D 74-75
A-	93-94	B- 85-88	C- 77-80	D- 70-73

## Class rank and GPA are weighted AP 1.06 Honors 1.03

\*Due to the COVID-19 Pandemic, Spring 2020 Quarter 4 grades have been excluded from Weighted GPA and Class Ranking.

## Student Outcome Data

Class of:	2021	2020	2019
Class Size	62	42	56
4-year College	37%	28.6%	30.4%
2-year College	23%	11.9%	30.4%
Vocational	0%	4.8%	1.8%
Military	12%	0%	1.8%
Gap Year/Workforce	23%	47.6%	25%
Total Scholarship \$	\$75,250	\$22,800	\$80,225

## School Test Information

+‡+	

	2021	2020	2019
SAT Reading/Writing			469
SAT Math			434
SAT Composite			903
Total AP Exams Taken	25	39	26
# Exams students earn 3+	21	19	17
%Students earn 3+ on AP	84%	48.7%	65.4%

\*Due to the 2020 COVID-19 Pandemic and cancellation of the SATs, we do not have current SAT data to report.

## The Old Orchard Beach High School Curriculum

Old Orchard Beach High School offers a diverse and comprehensive curriculum fully aligned with Common Core Standard, Maine Learning Results and Guiding Principles. Courses include a wide range of disciplines with varying levels of rigor and are geared toward preparing student to meet and exceed their career and college goals. Courses are taught on an 8 period schedule in 70-minute time-blocks. Full credit courses meet all year, and half credit courses meet for a semester. College Preparatory courses are labeled CP before the course name on the transcript. Students also have the option to participate in a variety of unique opportunities to include: job-shadowing and internships, Early College Enrollment courses via nearby 2 and 4-year colleges as well as vocational training programs with Biddeford Regional Center of Technology (BRCOT) programs.

## **Honors / AP Courses**

English Department: Honors English II AP Language/Comp. AP Literature/Comp Science Department:
Honors Earth/Space
Honors Biology
Honors Chemistry
Honors Physics
Honors Anatomy/Physio.
AP Biology
AP Chemistry

Math Department:
Honors Geometry
Honors Algebra II
Honors Pre-Calculus
Honors Calculus
College Algebra
AP Statistics
AP Calculus

**History Department:** 

AP World History AP European History AP Art History **World Language Department** 

Honors French Honors Spanish

## College and University Admissions for 2021-2022:

Berklee College of Music Boston University Bowdoin College Husson University Maine Maritime Academy Northeastern University Saint Joseph's College Of Maine Salem University
Simmons University
Southern Maine Comm Coll
UMass Lowell
Univ of Maine @Orono
Univ of Maine @ Augusta
Univ of Maine @Farmington

Univ of Maine @Presqe Isle
Univ of Southern Maine
Univ of MA Amherst
Univ of MA Boston
University of New England
University of New Hampshire
University of Rhode Island

## MAKING GOOD COURSE SELECTIONS

As with any other life decision you make, choosing the right courses throughout high school takes some effort in gathering information and being thoughtful. When making your course selections, you should consider the following: graduation requirements, your future plans, and your interests and abilities. Talk with key people such as your parents, guidance counselor, and teachers about your choices and goals. Developing a four year plan for high school will help you stay on track for reaching these goals. Putting thought into this process of choosing courses will help make your education at Old Orchard Beach High School more enjoyable and prepare you for your future. **The choices you make now will play a key role in the options available to you after high school graduation.** Choosing to do well in your high school academic program is the only way to ensure that many options will be available to you after high school. We are here to help you along the way, but only you can make it happen. We wish each of you success in making the most of your educational experience at Old Orchard Beach High School.

## **GRADUATION REQUIREMENTS**



Students are required to carry a load of at least six credits per academic year in order to be considered a full time student. Credit totals required for graduation are as listed:

#### 22 Credits Total to Graduate

## **Core Subjects Graduation Requirements**

English	4 Credits
Mathematics	3 Credits
Science	3 Credits
Social Studies	3 Credits
Phys Ed	1 Credit
Health	.50 Credit
Fine Arts	1 Credit

Electives 6.5 Credits

Community Serv 20 Hours

Professional Internship 30 Hours

## ACADEMIC COURSE ASSIGNMENT

Student placement in academic courses is based on teacher recommendations and/or test scores. If parents wish to discuss placement, they can set up an appointment through the guidance office.

## HONORS COURSES

An Honors option is offered in some classes. Students must sign a contract with each of their teachers in order to earn the honors distinction. In some courses there may be an "honors challenge" option.

## ADVANCED PLACEMENT (AP) PROGRAM

Old Orchard Beach High School offers students a chance to take college level courses and potentially earn college credit while in high school. One way is through the Advanced Placement program, in partnership with the College Board. Students may wish to prepare for the AP tests by working with teachers and/or by accessing test preparation materials from the website of the College Board.

Students who score well on the AP Exam may be eligible for college credit (a tuition savings) and/or advanced standing in that subject area when they go on to college. Students who take the AP courses are expected to take and pay for the AP Exam in the spring. Information about the program and test registration and fees is available from Ms. Roe, OOBHS AP Coordinator.

## **ONLINE COURSES**

Old Orchard Beach High School has computer-based curriculum that can be used for academic remediation or for credit recovery. Research-based techniques are used for program delivery and assessments. Students interested in online courses should contact their guidance counselor.

## **ENRICHMENT PROGRAMS**

## College Early Studies Programs/Concurrent Courses/Dual Enrollment/Additional AP courses

College Early Studies programs offer an opportunity for academically motivated juniors and seniors to take college courses while still in high school. It gives the student a chance to see what college courses are like, explore an area of interest in greater depth, and earn college credits. College courses are available through the community college, the University of Maine system, the Maine College of Art, and the University of New England.

## CREDIT RECOVERY

Students in need of credit recovery should meet with guidance to discuss options which may include summer, after school and/or school day programming to support their needs.

## DROPPING A SUBJECT

Students should choose their courses carefully. Specific dates are set up in August before the start of school for students to discuss changes to their schedule with the guidance counselor. Except in unusual circumstances, requests for changes in student schedules cannot be granted after the second week of school. There are, however, instances when changing or dropping subjects is both feasible and advisable.

## **Credit Status of Dropped Subjects**

Dropping a subject during the school year is considered an extreme measure and will be allowed only when unusual circumstances make it advisable. If a subject is dropped before the end of the first or third quarter progress reports, no grade will be entered on the student's permanent record. Any student who withdraws from a course after the initial progress report due date will have either a "withdrawal passing" or "withdrawal failing" on his/her permanent record. Any completed quarter grades will also be included in the permanent record.

## **Honor Roll Status**

Students must carry a minimum of five academic subjects and six credits to be eligible for the quarterly Honor Roll. Center of Technology students will receive one grade for classroom work and one for laboratory experience in computing Honor Roll status. Students must pass all subjects taken for credit, regardless of grading system used.

## **Highest Honors**

Students will receive "Highest Honors" if they have earned a grade of 93 or above in all subjects.

## **High Honors**

Students will receive "High Honors" if they have earned a grade of 85 or above in all subjects, but maintain an average of 93 or above for that quarter.

#### **Honors**

Students will receive "Honors" if they have earned a grade of 85 or above in all subjects. With "Honors", students may receive one grade of 77-84 provided there is a grade of 93-100 to offset that 77-84 grade.

## **Cum Laude Recognition (GPA's are not rounded)**

Honors Cum Laude - 3.5-3.7 90-93 Magna Cum Laude - 3.8-3.9 94-96 Summa Cum Laude - 4.0 97-100

## Senior Ceremony Roles (GPA's are not rounded)

Students will be honored at graduation in the following manner: Valedictorian – Highest GPA Salutatorian – Second Highest GPA Summa Cum Laude – 4.0 – higher 97-100GPA Magna Cum Laude – 3.8-3.9 94-96 GPA Cum Laude – 3.5-3.7 90-93 GPA

#### **Teacher Aide Policy**

Students who are teacher aides will receive a pass/fail grade and .25 credit per semester. A student must be carrying at least six academic credits in addition to the teacher aide position. Teacher aides will be set up by semester even if assisting in a full year course. To become a teacher aide at Old Orchard Beach High School, the following process must be followed:

- 1. The student must discuss his/her wish to become a teacher aide with the teacher involved.
- 2. The student must then obtain a <u>Request for Teacher Aide Position</u> form from the Guidance Office. This form must be completed by the student and returned to the guidance office.
- 3. The guidance department will notify the student if his/her request has been approved.

## **SCHEDULING PROCESS**

Students should carefully read the course information included in this course of study guide to select desired courses for the following year. The process for scheduling students grades 9-11 is as follows:

- 1. Teachers submit their recommendations for course levels in core subjects for each student.
- 2. Students will be provided the course of study guide information and given time to consult with their parent/guardian, teachers, and guidance counselor regarding their course selection.
- 3. Students will enter their choices for electives in powerschool portal.
- 4. Guidance may meet with students to review their schedule choices as needed.
- 5. Schedule requests are processed through the guidance office and PowerSchool Scheduling System. Final schedules are sent to students/parents in August. Students may come in on designated days in August to make schedule changes.

## **Scheduling of incoming Freshmen:**

- 1. The guidance counselors visit classrooms to discuss the course of study guide and talk about course selections.
- 2. An orientation is held for 8th grade parents and students.
- 3. Eighth grade teachers submit course recommendations.
- 4. Final scheudles are sent to students/parents in late August. Students will have the opportunity to come in on designated days in August to make schedule changes.

## **SUPPORT SERVICES**

At Old Orchard Beach, the following support services are available to help make the most of your high school experience.

## **GUIDANCE OFFICE**

The Guidance Office is full of resources to help students select courses, research careers and colleges, find out what career they wish to pursue, and obtain information on financial aid and scholarships. The guidance counselors assist students in a variety of areas, including course selection, study skills, schedule adjustments, reviewing course requirements, selecting and researching occupations, colleges, scholarships, testing, the college application and financial aid process, mediating with teachers and staff, and setting up parent/teacher meetings. Appointments to see the guidance counselor can be made through the guidance secretary or emailing the counselor. Please see the guidance web page for more information.

#### **PowerSchool Parent Portal**

You can access your child's academic progress, attendance, and notifications through our Powerschool Parent Portal. Log-in information is mailed out in September. The school will communicate through various media when academic reports are available. Don't hesitate to contact your child's teacher if you have any concerns or questions.

## **SCHOOL NURSE**

The school nurse serves the Jameson and Loranger Schools as well as the high school. She assists students with health and medical issues, coordinates school physicals, assists students in finding health and community resources, and provides health information.

## SOCIAL WORKER & SUBSTANCE ABUSE COUNSELOR

The school social worker and substance abuse counselor are available as additional support for our students. Referrals for these services are made through the guidance department.

## ART DEPARTMENT

Course Title	<u>Credit</u>	<b>Duration</b>
Art I	.50	semester
Art II	.50	semester
Painting	.50	semester
3D Design/Sculpture	.50	semester
Advanced Studio Art	1	year
Advanced Studio Art II	1	year

ART I Grades 9-12 .50 credit

Art 1 is designed to serve as a prerequisite and foundation course for those interested in meeting their fine arts requirement through visual art. Students will use the elements and principles of art to solve problems and express ideas and feelings. A variety of techniques and media will be explored. Assessments will be both written and project based.

ART II Grades 9-12 .50 credit

Prerequisite: Art I & Teacher Recommendation

Art II is designed for students who wish to continue working with the art foundations curriculum. Students will increase the quality of their work and focus on creating challenging projects in a variety of media. Personal interest will be explored while strengthening their technique and craftsmanship. Assessments will be both written and project based.

PAINTING Grades 10-12 .50 credit

Prerequisite: Art 1& Art II

Students will explore painting through the use of acrylics and watercolors. Skill and control of the medium will be the focus of this class. Color theory and mixing, along with the elements and principles of design will be utilized to create paintings that explore personal themes and styles. Assessments will be written and project based.

#### 3D DESIGN/SCULPTURE Grades 10-12 .50 credit

Prereauisite: Art 1& Art II

Students in this elective will use the elements and principles of design to create original, expressive 3D art forms in media such as wire, paper mache, clay, wood, and found objects. Projects will involve assemblage, modeling and carving techniques. Assessments will be both written and project based.

## ADVANCED STUDIO ART Grades 10-12 1 credit

<u>Prerequisite:</u> Art I, Art II, One Advanced Elective (Painting or 3D), & Teacher Recommendation
This studio art elective is geared for advanced art students wishing to focus on their independent practice and art
portfolio development. The course will be designed based on individual student interests and centered on skill and
concept development within a project-based format. This is a full year, 1 credit course.

## ADVANCED STUDIO ART II Grades 11-12 1 credit

<u>Prerequisite:</u> Art I, Art II, One Advanced Elective (Painting or 3D), Advanced Stdio Art I,& Teacher Recommendation

This studio art elective follows successful completion of Advanced Studio Art I and allows students to dive deeper into honing their fine art portfolio and independent practice as a visual artist. During semester one students focus on creative constraints, personal voice and problem-solving to prepare and refine their professional art portfolio. In semester two, students create a body of work exploring a personal concentration topic.

## **CULINARY ARTS DEPARTMENT**

Course Title	<u>Credit</u>	<u>Duration</u>
Culinary Arts I: Intro to Culinary Arts	.50	semester
Culinary Arts II: Foods of the World	.50	semester
Foods of the World Part 1 – Africa and Middle Eas	st .25	quarter
Foods of the World Part 2-Mediterranean Countrie	s .25	quarter
Culinary Arts Internship	.50	semester

CULINARY ARTS I Grades 9-12 .50 credit

This course is an introduction to culinary arts with emphasis on learning the fundamentals of cooking to include basic ingredients and cooking methods. Hands-on classes introduce students to safety and sanitation in the kitchen, tools, techniques, and equipment, cold foods preparation and seven basic cooking methods: boiling, broiling, roasting, baking, stewing, steaming, and sweating. Students learn how to apply the seven basic cooking methods to the preparation of foods: grains, vegetables, fruits, proteins, legumes and dairy; and how to use each in basic meal planning. Team building and time management skills are emphasized. (**Projected Culinary Arts Hospitality & Tourism Pathway Endorsement.**)

CULINARY ARTS II Grades 9-12 .50 credit

<u>Prerequisite</u>: Taken and passed Culinary Arts I with an 80 or higher.

Emphasis will be placed on more advanced food preparation and cooking methods of ingredients used in ethnic and regional food. Students will be able describe and prepare dishes from different regions. (**Projected Culinary Arts Hospitality & Tourism Pathway Endorsement.**)

## CULINARY ARTS INTERNSHIP Grades 11-12 .50 credit

Prerequisite: Culinary I & Culinary II

This course provides students with an opportunity to explore various career paths in the field of Culinary Arts by completing an internship. Local business partners will serve as mentors by providing a real-world connection to the many facets of operating a food oriented business or service. Students will be expected to spend a minimum of 40 hours per semester in a worksite of their choice. Journal entries, critiques of periodicals and a final presentation are required for credit. Students must have completed both Culinary Arts l and II and be a junior or senior.

## Foods of the World Part 1

Africa and Middle East Grades 10-12 .25 credit

Prerequisite: Culinary I and II

Emphasis will be placed on the food customs of this region. Foods will be prepared that are native to countries or regions in Africa and the Middle East. Dishes/foods might include: Mafe' (peanut stew), Egyptian Koshari, Sudanese Lentil Soup, Falafel, Kugels, Hummus, Chakchouka, Tabouli.

## Foods of the World Part 2

Mediterranean Countries Grades 10-12 .25 credit

Prerequisite: Culinary I and II

Emphasis will be placed on the food customs of this region. Foods will be prepared that are native to countries in the Mediterranean region, including Spain, Italy and Greece. Dishes/foods may include: paella, spanakopita, and risotto.

## **Culinary Arts Hospitality & Tourism Endorsement**

The students must successfully complete a minimum of 5 credits, in addition to the 16 core requirements. Two of those credits shall be from the Culinary Arts Department, including those offered through Early College at YCCC, SMCC, and University College of Saco.







## **ENGLISH DEPARTMENT**

<b>Course Title</b>	<u>Credit</u>	<b>Duration</b>
English I	1	year
English II	1	year
Honors English II	1	year
English III A & B	.50 each	semester
English IV A & B	.50 each	semester
AP English Language & Composition	1	year
College Composition	1	year
Folklore & Fairytales	.50	semester
Intro to Creative Writing	.50	semester
Creative Writing II	.50	semester

All English courses offered at OOBHS require students to read at grade level from a variety of genres, including poetry, drama, fiction and nonfiction. Additionally, students are required to be proficient writers and speakers at each grade level as they move through the English course sequence. All English courses also require students to engage in the research process and to be proactive, respectful members of a learning community.

ENGLISH I Grade 9 1 credit

Freshman will work throughout the year to answer the question: Who am I? The course emphasizes the foundations of effective writing, argumentation, and formal discussions, while studying fiction and nonfiction from around the world.

ENGLISH II Grade 10 1 credit

Prerequisite- English I

After exploring identity construction in the freshman year, sophomores will investigate how individual identities have been shaped by the world around them. This course has students focus on how to find evidence to support their claims and make their voices confidently heard. A variety of texts, both fictional and nonfictional, help students develop their literacy skills.

HONORS ENGLISH II Grade 10 1 credit

Prerequisites- English I and teacher recommendation

English II Honors students will study the material and meet the requirements of English II. Moreover, students will focus on how writers use rhetorical and language devices in their texts. Students will also complete additional reading and writing assignments that build on the work completed in English II. This course requires summer assignments.

ENGLISH III A & B Grade 11 .50 credit each semester

Prerequisites- English 9 & 10

From the Declaration of Independence to *The Great Gatsby*, English III examines the literary craft and central arguments of foundational American texts. We also investigate how war and other cultural shifts affect individuals and communities.

ENGLISH IV A & B Grade 12 .50 credit each semester

Prerequisites- English 9,10,11

In Senior English, we scrutinize the expectations American culture places on its citizens to be productive members of society. We also analyze our personal beliefs and values as we prepare for life after high school.

AP LANGUAGE & COMPOSITION - Grade 11-12 1 credit

Prerequisites: English 9,10 and teacher recommendation

AP Language engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. This course requires summer assignments and prepares students to take the AP Language exam in May. This AP class will replace either English III or English IV. Students will be required to take the AP exam in the spring. The student is responsible for the AP exam fee, although there is a need-based fee discount.

## COLLEGE COMPOSITION

Grade 12

1 credit

Prerequisite: Grade 12 and teacher recommendation

This dual-enrollment college course emphasizes the development of writing, analytical reading, and critical thinking skills so that students are able to communicate ideas, formulate arguments, and locate and use credible courses. Students will draft, revise, and edit short and long essays, including two research papers. Passing this course earns students both a Senior English credit and an English 101 credit in the Maine Community college system.

#### FOLKLORE & FAIRY TALES

**Grades 10-12** 

.50 credit

Fairy tales and folklore have drastically changed throughout the years. In this course, students will analyze the adaptation of fairy tales and folklore over time in order to cater to the popular audience and purpose of use. Original works of Hans Christian Anderson and The Brothers Grimm will be analyzed and compared to the modern day existence of the tales through Disney, graphic novels, and children's literature.

#### INTRO TO CREATIVE WRITING I

**Grades: 10-12** 

.50 credit

This semester-based elective requires students to compose original poetry, drama, fiction and nonfiction. Students will write about topics they find engaging as they take their pieces through the writing process in a workshop setting. This course is writing intensive.

#### **CREATIVE WRITING II**

**Grade 11-12** 

.50 credit

Prerequisite: Taken and pass Intro to Creative Writing I with 85

Creative Writing II is an elective for students who have completed Intro to Creative Writing I and want to continue to develop their writing craft and practice in a workshop setting. This course will emphasize the study of elements unique to different genres of writing. For students to sign up for Creative Writing II, they need to have earned an 80% or higher in Creative Writing I or have a recommendation from their current English teacher.

## **HEALTH AND PHYSICAL EDUCATION**

Course Title	<u>Credit</u>	<b>Duration</b>
Intro to Physical Education	.50	semester
Health	.50	semester
Crazy for Cardio	.25	quarter
Intro to Weight Training	.25	quarter
Advanced Weight Training	.25	quarter
Personalized Fitness	.25	quarter
Racket Sports	.25	quarter
Weight Training for High School Girls	.25	quarter
PE Activities	.25	quarter

INTRO TO PE Grades 9-10 .50 credit

This class must be taken before any physical education electives are taken. The purpose of Intro to PE is to promote and participate in physical fitness activity, develop motor skills, teach life-long fitness activities, and develop social skills such as cooperation, sportsmanship, teamwork, etiquette and safety. Students will engage in fitness enhancing activities and gain understanding of physical fitness concepts.

HEALTH Grade 10 .50 credit

Introduction to Health is required for all students. Students will receive instruction on how to live a healthy lifestyle. Topics will include community and consumer health, growth and development, nutritional and personal health, prevention and control of disease, substance use and abuse, and first aid and safety. CPR topics will also be taught.

CRAZY FOR CARDIO Grades 10-12 .25 credit

Prerequisite: Intro to PE

This class will use a variety of programs to meet individual needs to encourage increased heart rates and the benefits of cardiovascular wellness including, but not limited to: walking, stationary biking, and running.

#### INTRO TO WEIGHT TRAINING Grades 10-12 .25 credit

Prerequisite: Intro to PE

This course is designed to explore basic weightlifting activities and concepts. Students will engage in individualized resistance training programs to enhance fitness levels through weight training for a lifetime. Topics include identification of muscles, routines that target specific muscles, and construction of individualized lifting programs.

## ADVANCED WEIGHT TRAINING Grades 11-12 .25 credit

Prerequisite: Intro to PE and Intro to Weight Training

This course is focused on development and implementation of a resistance training program for each participant. We will incorporate many types of workouts and lifts. This class is for upperclassmen grades 11-12 preferably.

## PERSONALIZED FITNESS Grades 10-12 .25 credit

Prerequisite: Intro to PE

This course emphasizes total body fitness and focuses on aerobic activity and resistance training for a lifetime of wellness. Topics include cardiovascular activity, muscular strength and endurance, some cross-fit activities, plyometrics, and safe and sound activity principles.

## RACKET SPORTS Grades 10-12 .25 credit

Prerequisite: Intro to PE

This course is designed to enhance personal fitness levels through the use of racket sports. Topics include tennis and pickleball, workout routines which enhance performance in these sports, and development of motor skills related to these sports. Students will learn wellness enhancing activities for a lifetime.

## WEIGHT TRAINING FOR HIGH SCHOOL GIRLS. Grades 10-12

Prerequisite: Intro to PE

This course will be offered to girls in grades 10-12 grade. Students will be introduced to resistance training. Gaining an understanding of different movements, pairing of muscle groups and benefits of resistance training. We will be building individualized workout plans and goals.

.25 credit

PE ACTIVITIES Grades 10-12 .25 credit

Prerequisite: Intro to PE

In this class students will engage in physical fitness development through participation in team activities that include but are not limited to; soccer, volleyball, floor hockey, and basketball. Students will also engage in warm-up and workouts in the fitness room to further improve their physical fitness.





## **MATHEMATICS DEPARTMENT**

Course Title	<u>Credit</u>	<b>Duration</b>
Math Lab	.50	year
Foundations of Algebra	1	year
CP Algebra I	1	year
CP Geometry	1	year
Honors Geometry	1	year
CP Algebra II	1	year
Honors Algebra II	1	year
Honors Pre-Calculus	1	year
Contemporary Math	1	year
Probability and Statistics	1	year
College Algebra	1	year
College Calculus	1	year

MATH LAB .50 credit

For students who may need extra support to meet their full potential in College Prep courses.

#### FOUNDATIONS OF ALGEBRA

#### 1 credit

Foundations of Algebra provides both an introduction to Algebra and a thorough review of the foundational skills that will support students in their journey through math. The goal of this course is to provide students a setting where they can strengthen their foundational knowledge, develop a conceptual understanding of the material, and begin to connect the arithmetic operations and content to the use of variables. Students who take Foundations in 9th grade will be prepared to take CP Algebra I in 10th grade, and will be on track to complete CP Algebra II by their graduation. Topics covered include: arithmetic properties, working with real numbers (integers, decimals, and fractions), reading and interpreting data, ratios and proportions, exponents and radicals, introductory algebraic expressions and equations, and the coordinate plane.

CP ALGEBRA I 1 credit

CP Algebra 1 is a college-prep level class designed to build upon students' understanding of basic algebra concepts developed in middle school. The topics covered may include: solving equations and inequalities involving multiple steps, proportions, and absolute value; linear, quadratic, and exponential functions; radicals, exponents, and systems of linear equations. CP Algebra 1 will utilize Algebra both to solve problems and to learn new concepts.

CP Geometry 1 credit

Prerequisite: Completion of Algebra 1 with a 70% or above.

CP Geometry will look inductively at investigations and develop conclusions about the geometric shapes in the universe. CP Geometry reviews and reinforces key Algebra 1 skills required for success in geometry, such as simplifying and solving equations. Content covered includes: angles, lines, planes, polygons, circles, perimeter, area, surface area, volume. This course uses multiple resources, including but not limited to Gina Wilson's *All Things Geometry*, Khan Academy, and various additional resources in both print and digital formats.

## HONORS GEOMETRY 1 credit

Prerequisite: Completion of Algebra 1 with a 90% or above and/or teacher recommendation.

Honors Geometry will look inductively at investigations and develop conclusions about the geometric shapes in the universe. This course is faster paced and covers more content than CP Geometry. Students are expected to enter this course without the need for intensive Algebra 1 review. Content covered includes all of the following in addition to content outlined in CP Geometry: 3-D shapes, graphing, constructions, proofs, and trigonomic ratios. This course primarily utilizes Gina Wilson's *All Things Geometry* curriculum in conjunction with online resources, such as Desmos.

CP ALGEBRA II 1 credit

<u>Prerequisite:</u> Completion of CP Algebra I and CP Geometry with an 80 or higher or teacher recommendation. CP Algebra II will review Algebra I topics, and study the number system, first and second-degree equations, inequalities, exponents, radicals, irrational and imaginary numbers. The text for this class is <u>Glencoe Algebra II</u>. (All students are expected to purchase a graphing calculator for use in their math classes. In upper level courses (Probability and Stats, Pre-Calculus, Honors Pre-Calculus), graphing calculators are essential and will be used throughout the course.)

HONORS ALGEBRA II 1 credit

<u>Prerequisite:</u> Completion of Honors Geometry with a 90 or higher and/or teacher recommendation. Honors Algebra II, in addition to the standard topics in CP Algebra II, will emphasize the function concept and an approach that embodies not only the algebraic solution to the problems but also the graphical and numerical approaches as well. This course is a continuation of the preparation for Honors Calculus in the senior year. (All students are expected to purchase a graphing calculator for use in their math classes. In upper level courses (Probability and Stats, Pre-Calculus, Honors Pre-Calculus), graphing calculators are essential and will be used throughout the course.)

#### **CONTEMPORARY MATH**

1 credit

<u>Prerequisite:</u> teacher recommendation.

This course is designed to survey and develop an appreciation for mathematical tools that are useful in our contemporary world such as critical thinking, logic, sets, number theory, algebra and formulas, financial management, measurement units and conversions, geometry, statistics and applied problem solving.

COLLEGE ALGEBRA 1 credit

<u>Prerequisite:</u> Completion of CP Algebra II with a 90 or higher and/or teacher recommendation.

This course covers variables and symbols; scientific notation; formulas and literal equations; slope, intercepts, and equations of lines; graphs of linear and quadratic functions; graphs of linear inequalities; solving systems of linear equations; polynomials, products and factors; roots, rational exponents, and complex numbers; rational expressions; solving linear, quadratic, and higher order equations; solving linear inequalities; an introduction to exponential and logarithmic functions, and applied problem solving. Students enrolled in this course will have the opportunity of receiving 3 credits from Southern Maine Community College. Students use a college level textbook: *Algebra for College Students*, Lial, Hornsby, & McGinnis, 9th ed., Pearson, 2020

## HONORS PRE-CALCULUS

1 credit

<u>Prerequisite:</u> Completion of Honors Algebra II with a 90 or higher and/or teacher recommendation.

This course is designed to add depth 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.

## PROBABILITY AND STATISTICS

1 credit

<u>Prerequisite:</u> teacher recommendation.

Probability and Statistics will introduce the nature of classic probability and the calculations of its values, analysis of data distributions, central tendencies, deviation and variance, and a wide range of graphing techniques. (All students are expected to purchase a graphing calculator for use in their math classes. In upper level courses (Probability and Stats, Pre-Calculus, Honors Pre-Calculus), graphing calculators are essential and will be used throughout the course.)

#### **COLLEGE CALCULUS**

1 credit

<u>Prerequisite:</u> Completion of Honors Pre-Calculus with a 90 or higher and/or teacher recommendation. This course is meant to be equivalent to one semester of single variable college calculus or Calculus I. This course strengthens students' understanding of functions in preparation for the process of differentiation and integration. Calculus concepts explored include limits and continuity, derivatives, definite integrals, exponential and logarithmic functions, trigonometric functions, and techniques of integration. Emphasis is placed on the exploration of real-world calculus applications."

## MODERN WORLD LANGUAGE DEPARTMENT

Course Title	<u>Credit</u>	<b>Duration</b>
French I	1	year
French II	1	year
French III	1	year
French IV	1	year
Spanish I	1	year
Spanish II	1	year
Spanish III	1	year
Spanish IV	1	year
Independent Study in World Language	.50	semester

FRENCH I: Grades 9-12 1 credit

This is an introductory course intended for students who have had little or no exposure to the French language. Students will learn to express themselves in French on familiar, highly practiced topics using memorized words, phrases, and simple sentences. They will be able to understand highly predictable, formulaic language, both orally and in writing. The language proficiency goal at the end of this course is novice mid.

FRENCH II: Grades 10-12 1 credit

Prerequisite: Successful completion of French 1 and teacher approval

This course is a continuation of *French 1*. Students will explore cultural topics while building their proficiency in both spoken and written French. Students will become increasingly comfortable expressing themselves in practiced conversations on familiar topics using a wider variety of words, phrases, and simple sentences. They will be able to ask and answer questions about themselves and their immediate environment. They will be able to extract main ideas and occasional details from oral and written texts, and begin to make inferences. The language proficiency goal at the end of this course is novice high.

FRENCH III: Grades 11-12 1 credit

Prerequisite: Successful completion of French 2 and teacher approval

This course continues to use authentic materials to help students deepen their knowledge of the products, practices, and perspectives of the French-speaking world. Students will view, listen to, and read selections of increasing length and complexity on familiar topics. They will begin to create with the language, using high frequency and personalized vocabulary in strings of sentences. By the end of this course, students should show awareness of, and attempt to communicate using past, present, and future tenses. The language proficiency goal at the end of this course is intermediate low.

FRENCH IV: Grade 12 1 credit

Prerequisite: Successful completion of French 3 and teacher approval

This course is a continuation of *French 3*. Students will expand their cultural knowledge through increasingly complex authentic materials. They will begin communicating at the paragraph level, applying previously learned material in novel situations on topics of self, others, and everyday life. Students will apply a variety of comprehension strategies, including analysis of grammatical structures, to interpret meaning. Students at this level are consistently accurate in the present tense and begin to use past and future time frames correctly. They can be understood by native speakers accustomed to interacting with language learners. Successful completion of this course will result in an intermediate mid-level proficiency, which is the graduation standard recommended for Modern and Classical Languages for the State of Maine.

SPANISH I: Grades 9-12 1 credit

This is an introductory course intended for students who have had little or no exposure to the Spanish language. Students will learn to express themselves in Spanish on familiar, highly practiced topics using memorized words, phrases, and simple sentences. They will be able to understand highly predictable, formulaic language, both orally and in writing. The language proficiency goal at the end of this course is novice mid.

SPANISH II: Grades 10-12 1 credit

Prerequisite: Successful completion of Spanish 1 and teacher approval

This course is a continuation of *Spanish 1*. Students will continue to explore cultural topics while building their proficiency in both spoken and written Spanish. Students will become increasingly comfortable expressing themselves in practiced conversations on familiar topics using a wider variety of words, phrases, and simple sentences. They will be able to ask and answer questions about themselves and their immediate environment. They will be able to extract main ideas and occasional details from oral and written texts, and begin to make inferences. The language proficiency goal at the end of this course is novice high.

SPANISH III: Grades 11-12 1 credit

Prerequisite: Successful completion of Spanish 2 and teacher approval

This course continues to use authentic materials to help students deepen their knowledge of the products, practices, and perspectives of the Hispanic world. Students will view, listen to, and read selections of increasing length and complexity on familiar topics. They will begin to create with the language, using high frequency and personalized vocabulary in strings of sentences. By the end of this course, students should show awareness of, and attempt to communicate using past, present, and future tenses. The language proficiency goal at the end of this course is intermediate low.

SPANISH IV: Grades 11-12 1 credit

Prerequisite: Successful completion of Spanish 3 and teacher approval

This course is a continuation of *Spanish 3*. Students will expand their cultural knowledge through increasingly complex authentic materials. They will begin communicating at the paragraph level, applying previously learned material in novel situations on topics of self, others, and everyday life. Students will apply a variety of comprehension strategies, including analysis of grammatical structures, to interpret meaning. Students at this level are consistently accurate in the present tense and begin to use past and future time frames correctly. They can be understood by native speakers accustomed to interacting with language learners. Successful completion of this course will result in an intermediate mid-level proficiency, which is the graduation standard recommended for Modern and Classical Languages for the State of Maine.

## INDEPENDENT STUDY IN WORLD LANGUAGE: Grades 10-12 50 credit

Prerequisite: Teacher approval

Students may select one language of study from the twenty five languages offered by Rosetta Stone Language Learning and study that language in a virtual classroom setting. Students may start as beginners or test into one of the five levels offered within each language of study. Students must be self motivated and have a strong desire to study another language.

## **MUSIC DEPARTMENT**

Course Title	<u>Credit</u>	<b>Duration</b>
Chorus	1	year
Concert Band	1	year
Music Technology and Songwriting	.50	semester
Music Theory	.50	semester
Music Appreciation & History	.50	semester
Piano Class I	.50	semester
Piano Class II	.50	semester
Music Masterworks	.50	semester
Music of the Cinema	.50	semester

NON CREDIT OFFERINGS: Jazz Lab, Jazz Ensemble, Jazz Choir, Marching Band, Private Lessons

CHORUS 1 credit

Chorus is open to all vocal performers Objectives: The study and performance of high quality choral literature from a wide variety of sources. The use of music performance as a means of enhancing self-awareness, self-confidence, and personal discipline; realizing the satisfaction of commitment to goals and teamwork in achieving those goals. Understanding the beneficial aspects of music on the spiritual side of human nature.

CONCERT BAND 1 credit

Open to all instrumental performers. Objectives: The study and performance of high quality band literature from a wide variety of sources. The use of music performance as a means of enhancing self-awareness, self-confidence, and personal discipline; realizing the satisfaction of commitment to goals and teamwork in achieving those goals. Understanding the beneficial aspects of music on the spiritual side of human nature.

## MUSIC TECHNOLOGY AND SONGWRITING

.50 credit

This class involves learning about the past, present, and future of music technology. Units of study consist of introductions to electronic sequencing and looping, songwriting, melody and rhythmic integration, production and sound reinforcement. We will use the Soundtrap DAW as well as gain an introduction to playing the ukulele as a means for writing our own original works.

## MUSIC APPRECIATION AND HISTORY - grades 11/12

.50 credit

No previous musical experience required. This course teaches students how to really listen to music to get the greatest understanding of its expressive intent. A survey of the history of western music is done to show its connections with modern day music. Significant time investment will be required for reading assignments and listening to musical examples.

MUSIC THEORY .50 credit

Prerequisite: Music experience or permission of instructor.

This course teaches us the basic elements of music in a lab situation. Students learn how to read and write music and understand the primary components of rhythm, melody, and harmony. Basic singing, ear training, and piano skills are also taught.

PIANO CLASS I .50 credit

Learning to read and understand the basic elements of music through a beginning piano curriculum. Done in a lab format.

PIANO CLASS II .50 credit

<u>Prerequisite</u>: Successful completion of Piano Class I and teacher recommendation.

For those students who wish to explore more advanced study of the piano.

## MUSIC OF THE CINEMA: The Sounds that Make Our Movies More Meaningful .50 credit

An examination of the history and development of film music. In many ways film music has become the "classical" music of our time. This course will track the evolution of the art form from its earliest days to the present. Students will also have the opportunity to develop a short film scoring project using Garage Band and iMovie. For the student who loves music and the movies!

#### MUSIC MASTERWORKS .50 credit

This is a listening course open to all students. It is an enrichment program that involves listening to great works of western music over its history and then discussing the artistic and emotional aspects of each work. It teaches students to understand the power of the ear as a sensory organ, and will expose the students to extended works that they might otherwise never hear. Grading is pass/fail and based on participation

#### NON CREDIT MUSIC OFFERINGS

#### CHAMBER MUSIC

Open to any students interested in a small group work. (By arrangement with instructor).

## MARCHING BAND

Always one of the top performing organizations in the State, this ensemble provides students the opportunity to work in a challenging and rewarding medium with many performances. Large time commitment in the fall (mandatory 1 week late August drill camp). Many great times and lasting memories!

## JAZZ LAB

This is a beginning level ensemble which is open to interested instrumentalists who wish to participate and learn the jazz idiom outside of the classroom. Rehearsals are after school. This group only forms and operates when there are enough interested players available after the jazz ensemble has been selected.

#### JAZZ ENSEMBLE

**Prerequisite:** By Audition

This course is a highly intensive performance-oriented group. Expectations are for an above average commitment to musical performance, and for the development of sophisticated technical and listening skills. This group travels to festivals and competitions, such as the Berklee Jazz Festival, and the district and state Jazz Festivals.

## JAZZ Choir

**Prerequisite:** By Audition

This course is a highly intensive performance-oriented group. Expectations are for an above average commitment to musical performance, and for the development of sophisticated technical and listening skills. This group travels to festivals and competitions, such as the Berklee Jazz Festival, and the district and state Jazz Festivals.

## SCIENCE & TECHNOLOGY DEPARTMENT

<b>Course Title</b>	<u>Credit</u>	<b>Duration</b>	
Earth & Space Science	1	year	
Honors Earth & Space Science	1	year	
Biology	1	year	
Honors Biology	1	year	
AP Biology*	1.5	year	
Physical Science	1	year	
Chemistry	1	year	
AP Chemistry*	1.5	year	
CP Physics	1	year	
Honors Physics	1	year	
Honors Anatomy and Physiology	y 1	year	
Environmental Science (USM)	1	year	
Ecology	.50	semester	
Oceanography	.50	semester	
Science Island	.50	semester	
Science & Skepticism	.50	semester	
*(AP Biology and AP Chemistry are offered alternating years.)			
Industrial Design 1	.50	semester	
Industrial Design 2	.50	semester	
Industrial Design 3/Indep Study	.50	semester	
Architecture and Mechanical			
Computer Aided Design (CAI	O) .50	semester	
Drone Technology	.50	semester	
Pre-Engineering	.50	semester	
Robotics Engineering	.50	semester	
Projects in Engineering	.50	semester	

## **Science Course Descriptions**

#### EARTH & SPACE SCIENCE

Grade 9

1 credit

Earth and Space Science introduces students to the eight science and engineering practices that serve as the high school science graduation standards. There will be a strong emphasis on both literacy and numeracy skills, including applications of technical writing and algebra. Students will demonstrate proficiency through explorations in astronomy, geology, hydrology, and meteorology. Units include plate tectonics, Earth's materials and systems, the history of Earth, Earth and the solar system, the universe and its stars, the role of water in Earth's surface processes, and weather, climate, and biogeology.

### HONORS EARTH & SPACE SCIENCE Grade 9 1 credit

Prerequisite: LMS Teacher recommendation

This course is offered for students who want to prepare themselves for the rigor of future honors courses and Advanced Placement courses. Students will learn the Earth and Space Science curriculum at an accelerated pace and in greater detail. Emphasis will be on clear communication through writing and speaking.

BIOLOGY Grade 10-11 1 credit

Prerequisite: Successful completion of Earth & Space Science.

This first year course is designed to introduce students to the overall importance and major themes of Biology. Students will engage in hands-on lab activities, science practices, and make real-world connections. The major units of the course are evolution, cellular biology, matter & energy, heredity, and interdependence. Students will investigate living systems at the molecular, cellular, and organismal levels. Upon completion of the course students will be able to describe how evolution drives the diversity and unity of life, explain the relationship between structure & function, and appreciate the importance of biodiversity of life on earth.

## HONORS BIOLOGY Grade 10-11 1 credit

Prerequisite: Successful completion of Earth & Space Science with a minimum grade of 85 and teacher recommendation.

This first year course is offered to high-achieving students who wish to prepare themselves for the rigor of Honors & Advanced Placement. Students will learn the material at an accelerated pace and in greater detail. The course involves inquiry based laboratory work, and requires a great deal of

independent learning by the student. Students will be building upon factual knowledge as they start to unravel the processes of life and apply their knowledge. Critical reasoning is stressed in the core content areas and it is important for students to be able to make connections across units.

A.P. BIOLOGY Grade 11-12 1.5 credits

Prerequisite: Successful completion of CP Biology with a minimum grade of 90 or successful completion of Honors Biology with a minimum grade of 85 and teacher recommendation.

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions. The course is based on four Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about living organisms and biological systems.

Big Ideas:

- The process of evolution explains the diversity and unity of life.
- Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.
- Living systems store, retrieve, transmit, and respond to information essential to life processes.
- Biological systems interact, and these systems and their interactions possess complex properties

Students are required to take the AP exam in the spring and are responsible for the AP exam fee. There is a reduced fee for "Free/Reduced" lunch recipients.

## PHYSICAL SCIENCE Grades 11-12 1 credit

Prerequisite: Junior/Senior, Earth and Space Science, Biology, and teacher recommendation.

This course is designed to give students a sampling of physical science concepts related to chemistry and physics. Students will be introduced to the tiniest particle that makes up matter, the atom, and explores how those atoms interact to help us understand the world we are in. Students will also investigate the forces that make things move, how energy works, how electricity works, and how waves transmit amazing things. Students will be encouraged to explore the relationship between science and everyday life.

CHEMISTRY Grades 11-12 1 credit

Prerequisite: Successful completion of Algebra I.

CP Chemistry provides an in-depth study of matter, its composition, and the changes it undergoes. The course is designed for the college-bound student and a strong emphasis is placed on the eight science and engineering practices. Topics include matter and its properties, atomic theory and structure, chemical bonds, formulas and equations, kinetic theory and the gas laws, quantum mechanics, reaction mechanisms, solutions, and nuclear chemistry.

## A.P. CHEMISTRY Grades 11-12 1.5 credit

Prerequisite: Successful completion of Chemistry and Algebra II and teacher recommendation.

This course is designed to be the equivalent of a general chemistry course usually taken the first year of college. It serves to challenge students interested in science, better prepare anyone pursuing a science degree in college and in some cases, enables them to undertake second-year chemistry courses as college freshmen. The curriculum focuses on the six big ideas – structure of matter, properties of matter, chemical reactions, reaction rates, thermodynamics and equilibrium. A special emphasis will be placed on the eight science practices, which give students the opportunity to engage in authentic skills practiced by scientists in the field. These include laboratory work, writing reports, giving presentations and completing projects. Students are required to take the AP exam in the spring and are responsible for the AP exam fee. There is a reduced fee for "Free/Reduced" lunch recipients.

CP PHYSICS Grade 12 1 credit

Prerequisite: Successful completion of Geometry and enrolled concurrently in Algebra II.

CP Physics is designed for students with a strong foundation in mathematics and the physical sciences. The format will include lecture/note-taking, problem-solving, and laboratory work. Quantitative skills learned in second year algebra/trigonometry and chemistry will be employed in the problem solving concepts covered. General areas of study will include concepts of mechanics, motion, astronomy, light, sound, energy, magnetism, and electricity. Students will be assessed using the eight science and engineering practice standards.

## HONORS PHYSICS Grade 12 1 credit

Prerequisite: Successful completion of Algebra II and teacher recommendation.

Honors Physics is designed for the college-bound student interested in a scientific field. It is an in-depth study of basic energy forms, transformations, and principles. Topics studied include motion, forces, gravitation, momentum, rotational dynamics, electricity, energy and waves. Activities include lab activities, lectures and note taking, projects, presentations, and research. Students will be assessed using the eight science and engineering practices standards.

#### HONORS ANATOMY AND PHYSIOLOGY Grade 11-12 1 credit

Prerequisite: Successful completion of CP Biology with a minimum grade of 85 or successful completion of Honors Biology with a minimum grade of 80 and teacher recommendation.

This course is an in-depth examination of each system of the body, with clinical connections made throughout the course of study. This course is particularly appropriate for students interested in pursuing further study in a medical field or in understanding the human processes. The class consists of note taking, lab work, dissections, group projects and formal assessments.

## ENVIRONMENTAL SCIENCE (USM) Grades 11-12 1 credit

Prerequisites: Earth and Space Science and Biology

This honors level course examines the science of environmental problems, the interrelationship between humans and the natural world, and potential solutions to the environmental problems. Specific focuses will be on land, air, and water pollution, biodiversity, climate change, public health and sustainability. This course is designed to be equivalent to a one semester environmental science college course.

## ECOLOGY Grades 11-12 .50 credit

**Prerequisites:** Completion of biology

Ecology is the study of living organisms and their interactions with humans and the environment. It is a broad discipline that encompasses terrestrial (land), aquatic (water), estuarine (transition from freshwater to ocean water) and marine (ocean) environments. Specific areas of study for this course will include habitats, community structure and development, population growth and regulation, competition, and biodiversity. There will be an emphasis on ecological systems in Maine, ranging from predator-prey relationships to ecological succession.

## OCEANOGRAPHY Grades 10-12 .50 credit

Prerequisites: Earth and Space Science

Even though the majority of the Earth's surface is covered by seawater, the average person is less aware of what is happening in the ocean than what is happening on land. In this course, we will focus on the importance of ocean processes for the functioning of our planet and work together to answer several fundamental questions: Which factors control life in the ocean? How do we know what we know about the ocean? What's at the bottom of the ocean? How does the water in the ocean move? How are human activities and climate change altering the ocean?

## SCIENCE & SKEPTICISM Grades 10-12 .50 credit

Science and Skepticism teaches students how to use skeptical philosophy, critical thinking, and knowledge of basic science to test empirical claims. The course provides an overview of basic neuroscience and the psychology of belief while highlighting innate cognitive biases and logical fallacies. Students will learn to access peer-reviewed research and design a properly controlled experiment. Topics will range from popular conspiracy theories to fad diets and medical pseudoscience. This course is designed to provide a framework from which new information can be analyzed and evaluated for accuracy.

SCIENCE ISLAND Grades 10-12 .50 credit

Prerequisite: completion of Earth and Space Science (or Physical Science), Alg. 1 and Biology (can be concurrently enrolled)

You and your classmates have been shipwrecked on a deserted island and you must use your engineering skill to survive and eventually to signal for help. Using only hand tools and the debris that has washed up on shore, you will design and build solutions to a series of survival challenges, including the following: a compass, a hand-crank generator, a saltwater battery, a distress beacon, and of course, a friction fire! In order to "survive", you will need strong math and science skills and the ability to work collaboratively as a team.

## **Techonology Course Descriptions**

NOTE: For the following courses: This program utilizes performance-based instruction involving performance-based assessments. A systematic observation is performed on the students and assessed accordingly. The students are assigned a complex task or to create a product where they are assessed on both the process and end result of their work.

## INDUSTRIAL DESIGN 1 Grades 9-12 .50 credit

This course will introduce students to the Industrial Design Process of creating original projects in a variety of mediums, tools, techniques and processes. The role of an industrial designer is to create and execute design solutions for problems of form, function, usability, physical ergonomics, marketing, brand development, and sales. This course covers the following topics: drawing project plans, the design process, learning proper tool and machinery safety, construction process, and finishing process of completing a project.

## INDUSTRIAL DESIGN 2 Grades 9-12 .50 credit

Prerequisite: Industrial Design 1 Students will continue to explore the Industrial Design Process, a process of design applied to products that are to be manufactured through techniques of mass production. This course will continue to cover the following topics: drawing project plans, the design process, learning proper tool and machinery safety, construction process, and finishing process of completing a project.

## INDUSTRIAL DESIGN 3 / INDEP STUDY Grades 10-12 .50 credit

Prerequisite: Industrial Design 1, 2 & Teacher Recommendation

This course will allow further study for students to be problem solvers, innovators, inventors, self-reliant, logical thinkers and technologically literate. Students will apply prior knowledge learned in Industrial Design 1 & 2 to independently design projects in the following areas: Mechanical/Architectural CAD (Computer Aided Design), Metal and Wood Science, Robotics, Coding, and Community Awareness Outreach projects.

## ARCHITECTURE AND MECHANICAL

COMPUTER AIDED DESIGN (CAD) Grades 9-12 .50 credit

This is a great course for students considering a career in Engineering, Architecture, or Interior Design. Students will explore architectural and mechanical drafting using a CAD program and completing a variety of design projects such as: designing a residential home and drawing a variety of mechanical parts.

## DRONE TECHNOLOGY

**Grades 10-12** 

.50 credit

**Prerequisite: Industrial Design 1** 

In this semester course, students will have the opportunity to explore the new and rapidly changing industry of drones and their uses. Students will learn the basics of coding, programming, assembly and repair while working through multiple lessons designed to be challenging and provide insight to the limitless uses of drones.

## PRE-ENGINEERING

Grades 9-12

.50 credit

Prerequisite: None

Pre-Engineering is intended to give students an overview of engineering. Students will explore what engineering is, what it means to be an engineer, and how to do engineering. Students study the engineering design process, written and oral communication, interpersonal skills, team-building, and technical drawing. Both in teams and individually, students face a series of engineering challenges all involving science content. Upon completion, students should be able to understand the engineering process and professions.

### ROBOTICS ENGINEERING

Grades 9-12

.50 credit

Prerequisite: Completion of Pre-Engineering

This course advances students' engineering and technology proficiency with a focus on robotics. Students will work with VEX robotics equipment to gain skills and knowledge about structural, motion, and power systems in robots, as well as energy transfer and mechanical systems. Students will have the opportunity to build, test, and modify multiple robots to meet the requirements for tasks assigned to them. Some assessments are based on the performance of each team's robot in the designed competitive tasks.

## PROJECTS IN ENGINEERING

grades 9-12

.50 credit

Prerequisites: Pre-Engineering

Projects in Engineering is a project-based class that will focus on the topics of energy efficiency, renewable energy technologies, mechanical systems, and man-made infrastructure. Students will take on the role of engineers as they design, analyze, build, and test possible solutions to problems while considering the limitations imposed by practicality, safety, and cost.



## **Robotics Club:**





## **Industrial Design 1,2, & 3 and Indep Study:**







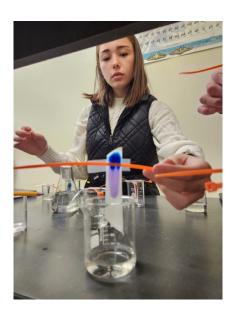


**Science Island** 





Chemistry



## SOCIAL STUDIES DEPARTMENT

Course Title	<u>Credit</u>	<b>Duration</b>
Global Studies	1	year
U.S. History	1	year
Honors U.S. History	1	year
AP U.S. History*	1	year
Participation in Government	.50	semester
Financial Literacy	.50	semester
Intro to Maine Studies	.50	semester
History of Disease	.50	semester
Introduction to Psychology	.50	semester
Introduction to Sociology	.50	semester
The Holocaust & Human Behavior	.50	semester
AP European History*	1	year
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<sup>\*(</sup>AP US History and AP European History are offered alternating years.)

## GLOBAL STUDIES Grade 91 credit

This course introduces students to high school social studies by looking at the relationships between geography, culture, and history. Students will examine major themes in geography and key turning points in world history to better understand how the physical world shapes human experience. Through reading, writing, and project-based learning, students will explore the connections between events and problems of the past and the challenges we face today.

#### CP US HISTORY Grade 10-11 1 credit

This college-prep course provides a specific overview of the history of the United States from the Colonial Period to the late 20th century. Students will examine the cultural, political, geographical, economical and technological changes that took place and have helped to shape and guide us as a nation today. Students will complete a variety of assignments / tasks ranging from note-taking, reflection papers, journals, major essays, projects, quizzes, and unit exams.

#### HONORS US HISTORY Grade 10-11 1 credit

This advanced course provides a specific overview of the history of the United States from the Colonial Period to the late 20th century. Students will examine the cultural, political, geographical, economical and technological changes that took place and have helped to shape and guide us as a nation today. Students will complete a variety of assignments / tasks ranging from note-taking, reflection papers, journals, major essays, projects, quizzes, and unit exams.

## AP US HISTORY Grade 11-12 1 credit

This is a one-year course which focuses on the development of historical thinking skills and an understanding of content learning objectives organized around seven themes, such as identity, peopling, and America in the world. In line with college and university U.S. history survey courses' increased focus on early and recent American history and decreased emphasis on other areas, the AP U.S. History course expands on the history of the Americas from 1491 to 1607 and from 1980 to the present. Students are required to take the AP Exam in May for college credit. Students are required to take the AP exam in the spring and are responsible for the AP exam fee. There is a reduced fee for "Free/Reduced" lunch recipients.

## PARTICIPATION IN GOVERNMENT

Grade 12

.50 credit

This semester course takes an in-depth look at the American system of government and how its institutions function. It explores how various factors have changed the scope of the U.S. Constitution. Students will learn the basic values, principles, and ideas that play a vital role in American Society. The course is designed to create a broader knowledge and understanding about the idea of citizenship and how it functions in the American political system.

#### FINANCIAL LITERACY

**Grade 11-12** 

.50 credit

This course is designed to help all students understand basic economic life skills in our business world. The students will develop a money management plan; keep budget records, use checking accounts and other banking services. They will also complete units on income taxes, being an informed consumer, consumer rights and responsibilities, using credit wisely, and insuring against loss. (**Projected Culinary Arts Hospitality & Tourism Pathway Endorsement.**)

## **Social Studies Electives**

All students are required to take at least 1 semester (5 credit) of social studies electives

## INTRODUCTION TO MAINE STUDIES Grade 11-12

.50 credit

An interdisciplinary approach to the study of Maine through sources in history, literature, political science, Native American studies, Franco American studies, and other fields. The unifying theme is the significance of place in understanding the interaction between landscape and people.

## INTRODUCTION TO PSYCHOLOGY Grade 11-12 .50 credit

This semester course is designed to provide the student with a broad overview of the major theories and topics in the study of human and animal behavior. Emphasis will be placed on the understanding of the basic principles in areas such as personality, learning, consciousness, memory, human development, and mental dysfunction. The question of human behavior as a product of nature (genetics) or nurture (environment) is a continual theme in the course. Contemporary issues and research in the field of Psychology will be integrated into the course throughout the semester. Towards this end, the course utilizes a number of resources. In addition to the textbook, related works of literature, film, primary resource documents, and the Internet will be used to help enhance student understanding of the content.

## INTRO TO SOCIOLOGY Grades 11-12 .50 credit

This elective course is a systematic study of social behavior and human groups. It focuses on the influence of social relationships upon people's attitudes and behavior and on how societies are established and changed. This course provides students with both methodologies and knowledge of the study of critical social issues ranging in scope from family to global.

#### HISTORY OF DISEASE Grade 10-12 .50 credit

Prerequisite: Successful (proficient) completion of Global Studies

Smallpox, cholera, malaria, ebola... Throughout history, some of the most pivotal changes came about from the smallest of enemies-- viruses and bacteria that shaped empires, influenced social hierarchies, and revolutionized technologies and the way we exist in the world. This class will focus on themes of history and geography, overlapping with the medical advancements and challenges of the modern world.

## THE HOLOCAUST & HUMAN BEHAVIOR Grade 11-12 (Grade 10 w/recom) .50 credit

Prerequisite: Successful (proficient) completion of Global Studies

The mission of this class is to expose students to the issues associated with genocide, and the broader issue of the harms of the relationship between stereotypes and human behavior We will explore the creation, perpetration, and facilitation of genocide through multiple approaches including: history, sociology, psychology, political science, and economics. The Holocaust will be used as the baseline to then examine other atrocities of the 20th and 21st century. They include but are not limited to: Armenian Genocide, Soviet Union programs under Lenin and Stalin, The Invasion of Manchuria, Mao's great leap forward, Pol Pot and the Khmer Rouge, Rwanda, Bosnia and modern North Korea.

## AP EUROPEAN HISTORY--

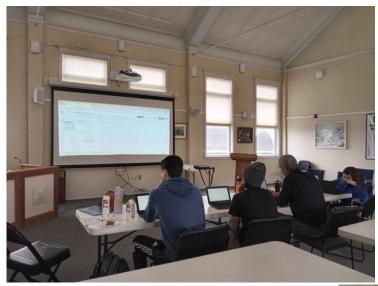
## **Grade 11-12**

1 credit

Prerequisite: Junior/Senior status <u>plus</u> teacher recommendation

AP European History is designed to be the equivalent of a two-semester introductory college or university European history course. In AP European History students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing historical evidence; contextualization; comparison; causation; change and continuity over time; and argument development. The course also provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity.

Students are required to take the AP exam in the spring and are responsible for the AP exam fee. There is a reduced fee for "Free/Reduced" lunch recipients.





# Old Orchard Beach High School Special Education Program Course Descriptions (IEP Driven)

## **ACADEMIC RESOURCE COURSES**

## **English**

## Co-Taught English Grades 9-12 1 credit

Students may be recommended by the IEP Team for a co-taught class. Classes are taught by certified regular education and special education teachers. Specially designed instruction is integrated into daily lesson plans and provided in the regular education classroom setting.

Resource English Grades 9-12 1 credit

Resource English is a special education class for learning reading and writing skills in a small group setting. Specially designed instruction is delivered based on students' learning styles and needs using an evidence-based curriculum.

## Math

Resource Math Grades 9-12 1 credit

Resource math is a special education class for learning math skills in a small group setting. Specially designed instruction is delivered based on students' learning styles and needs using an evidence based curriculum.

#### **Science**

Resource Science Grades 9-12 yr long-1 Credit

Resource science is designed to remediate basic reading/writing skills to assist students in transitioning to a regular education science class. Classes are a two-year rotation of Earth Science and Biology Concepts. Instruction is differentiated to the student's individual skill level.

## **Social Studies**

#### Resource Social Studies Grades 9-12 Yr-long: One Credit

Resource social studies is designed to remediate basic reading/writing skills to assist students in transitioning to a regular education social studies class. Classes are a two-year rotation of Global Studies and U.S. History. Instruction is differentiated to the student's individual skill level.

### ORGANIZATIONAL SUPPORT

## Executive Functioning Skills Grades 9-12 One Semester: .25 Credit

EFS is designed to support successful and increased assignment completion for students in general education classes by teaching specific executive functioning and study skills. Students will learn and practice using organization and planning tools, such as planners/checklists to increase independence, self-confidence, and self-advocacy skills through support and coaching.

## SELF-CONTAINED PROGRAMS

## Intensive Needs Program (Functional Academics & Life Skills) Grades 9-12

This self-contained program is intended to provide appropriate educational programming for students with significant cognitive and physical disabilities who are unable to access their education in a less restrictive setting. The purpose of this program is to provide students with the academic and adaptive daily living skills necessary to transition to community-based programming after graduation.. Instruction is differentiated to the student's individual physical and cognitive skill level. Students enroll in regular education elective classes as appropriate. Extra adult support is provided, with the intent to fade as students progress through the program.

## **Behavioral Support**

#### Grades 9-12

The program is designed to shape student behavior and to allow access to both special ed and mainstream classes and provide transitional support to graduating seniors. The academic focus of the program is based on the curriculum within mainstream courses and is adapted as needed for each individual student's needs. Schedules are individualized to ensure yearly progress with earning necessary graduation credits.

## SPECIAL EDUCATION SERVICES

The Individual with Disabilities Education Improvement Act of 2004 (IDEA 2004) is a federal law which mandates a free and appropriate public education for students with disabilities. Maine Special Education Regulations define a student with a disability as having one or more of the following disabilities: autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech and language impairment, traumatic brain injury, visual impairment including blindness.

Students with a disability are identified through a referral system and a Individual Education Program (IEP) process. Referrals may be made by parents or teachers who have reason to believe that the student may have a disability which may require special education services. Students may also refer themselves. Parents are notified when a referral has been made, and parental consent is required before any special education evaluation or initial service is provided.

The Old Orchard Beach Schools provide a continuum of special education placements in order to meet the needs of students with disabilities. Special education services (such as direct instructional services, consultation and monitoring services) are available in conjunction with regular class placements, self contained placements, and tutorial services, including hospital and homebound services.

Supportive services, such as physical therapy, occupational therapy, social work and speech/language therapy, are also available whenever such services are required to assist a student with a disability to benefit from special education services. Academic success, emotional growth and life skills are the focus of the high school special education program, with the goal being a smooth transition from high school to the adult world.

Any questions regarding special education can be directed to your child's special education case manager, the school principal or to the Director of Special Education, located at the Superintendent's Office.





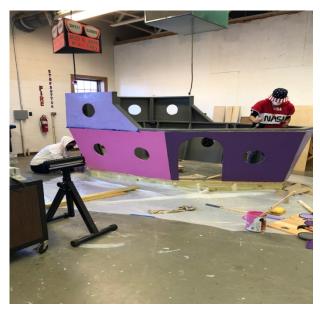
## PATHWAYS PROGRAM

The Old Orchard Beach High School Pathways Program is designed to provide high school students with an alternative approach to the traditional classroom experience. Students are encouraged to create personal goals based on individual needs, abilities, and interests. The program offers a safe and supportive environment and provides opportunities through both academic and experiential learning to strengthen connections with teachers, students, school and community.

Pathway students are provided with credit recovery options, individual academic support, career exploration, and experiential learning opportunities. Our students travel off campus to learn about careers, have built cedar strip canoes, and have earned Fine Arts Credits in our Introduction to Rock and Roll course. Each student will receive a traditional OOBHS diploma following the successful completion of the program, which may or may not include credits earned through other OOBHS classes.

Perspective applicants must interview and fulfill certain requirements for admission. Interested students should contact their guidance counselor, for more information.







## BIDDEFORD REGIONAL CENTER OF TECHNOLOGY

BRCOT provides career and technical education for students from Biddeford, Kennebunk, Old Orchard Beach High Schools and Thornton Academy. Training an educated workforce is key to developing a successful and productive community and economy. Through our career clusters, pathways and programs, we empower students to develop the attributes and skills necessary to become successful citizens, workers and leaders.

BRCOT students have access to a rigorous curriculum, hands-on learning, career pathways, articulated college credit with Maine's postsecondary institutions, national industry certifications, employability skills, safety training and technical preparation. A majority of the graduates continue their training and education while some prefer to enter full time employment.

If you are interested in taking a course at BRCOT please click on the link below to look at their course offerings. Students are offered a chance to go visit the programs and then apply to the program they are interested in.

Course Catalog: <a href="https://drive.google.com/file/d/1hf9P3kUadNdB91a8bGLZ\_3ikr9hy88fn/view?usp=sharing">https://drive.google.com/file/d/1hf9P3kUadNdB91a8bGLZ\_3ikr9hy88fn/view?usp=sharing</a> BRCOT Site: <a href="https://www.biddefordschools.me/o/brct">https://www.biddefordschools.me/o/brct</a>

## GRADUATION REQUIREMENT CHECKLIST GUIDANCE DEPARTMENT OLD ORCHARD BEACH HIGH SCHOOL

Name:_		Class of:		
Parent/Guardian:	Contact	info:		
ENGLISH (4)	<u>MATH (3)</u>	SCIENCE (3)		
English I	Math:	Science:		
English II	Math:	Science:		
English III	Math:	Science:		
English IV	Math:	Science:		
SOCIAL STUDIES (3)	PE/HEALTH	FINE ARTS		
Global Studies	Intro to PE I	Fine Arts .50		
US History	PE elective:/	Fine Arts .50		
Financial Lit .50	Health .50			
Part in Gov't50	_	Community Service:		
CUMULATIVE CREDITS	CREDITS NEEDED TO BE PROMOTED	DATE OF LAST ENTRY		
Grade <u>9</u>	5			
Grade 10	. 11			
Grade 11	. 17			
Grade 12				
NOTES:				

# **NOTES**