LLDOGS **PROGRAM OF STUDIES** 2023-2024

Hello students,

The 2023-2024 Old Rochester Regional High School Program of Studies is now available for you to examine with your family. Please read through the document carefully as you begin the process of selecting your courses for next year. It is important to share the Program of Studies and your course selection card with a parent or guardian to keep them informed of the difficult choices that you have for your academic future. You will be meeting with your teachers in the coming days to have discussions around your proper placement for next year.

The new courses we will roll out next year include Anatomy & Physiology II H, Cybersecurity I and II, Unified Physical Education, College Prep and Honors Portuguese 3. Please be mindful of prerequisites for courses you are intending to register for as your work this current year will position you for future success.

Thank you for downloading and reading this important document. Best of luck as you embark on your course selections for the coming school year. Please contact a guidance counselor if you have any questions.

Sincerely,

MUE

Principal

TABLE OF CONTENTS

Principal's Message	2
Course Selection Information	6
Graduation Requirements	
Fine Arts Graduation Requirement	10
<u>AP Capstone</u>	13
English	17
Mathematics	31
Science & Technology	39
Social Studies	57
Unified Arts	67
<u>Art</u>	68
Early Childhood Education	74
Music	76
Wellness.	81
World Language	87
Index	100



COURSE LEVEL DESCRIPTIONS

All levels of core courses prepare you for college. Students in a particular course follow the same curriculum with varying degrees of pace, depth and breadth based upon their level of academic development.

In College Preparatory courses, you are expected to complete work more independently and explore topics more deeply and at a faster pace.

At the Honors level, you are expected to apply concepts to new situations and develop more critical thinking skills. The honors level will move at a faster pace, and you will be expected to complete more work outside of class.

Advanced Placement (AP) courses require a substantial amount of independent work. Coursework is equivalent to a semester college level class. The AP curriculum is designed for the AP exam. All students enrolled in Advanced Placement courses are required to complete the appropriate AP exam issued by the College Board. These exams are administered at the school in May. Failure to complete the appropriate College Board AP exams will result in weighting the particular course as "Honors", not "Advanced Placement". Colleges will be notified if such a change occurs.

COURSE SELECTION PROCESS

The selection of courses from the program of studies is the most important task that should be carried out by teachers, parents and students. The steps to be used are as follows:

- 1. Counselors will meet with you to discuss choices.
- 2. Teachers will initial your student course request card. Teacher recommendations for your placement provide valuable insight into the appropriate level or course that you may eventually take.
- 3. Parents should review your request card with you and sign it. If your parents have any questions, they should contact your subject teacher or counselor.
- 4. Your counselor will review your course requests, and individual appointments will be made with students as needed.
- 5. Academic schedules will be finalized for all students by June 1st of the previous school year. Students will not be allowed to add or drop courses following the end of the school year. The only schedule changes that will be permitted will be level changes. A level refers to "level of difficulty" as in Advanced Placement, Honors, and College Prep A. A level change will require the authorization of the Principal. Prior to authorizing a level change, the Principal may conduct a meeting with the student, parents, guidance counselor, and teacher to evaluate the appropriateness of the request. Level changes will not be permitted after term 1.

Please keep in mind the following when selecting your courses:

- 1. The master schedule is based on student requests. Please make informed decisions when selecting courses. Following initial registrations, time will be allowed for parent-sponsored course changes until the end of the current school year. This can be done by scheduling a meeting with the counselor, an administrator, and a subject-area teacher.
- 2. Course selection changes will not be considered after the end of the previous school year.
- 3. You should take courses that will challenge, but not overwhelm you.
- 4. You should select alternative electives, as your first choice may not be available.
- 5. Please note prerequisites when selecting courses.

GRADUATION REQUIREMENTS

In order to graduate from Old Rochester Regional High School you must:

- A. Students will need 120 total credits to graduate. In order to receive full credit you must receive a passing grade of 65 (D) or above and meet the attendance requirements. You will earn 5 credits for each full year course and 2.5 credits for each semester (half year) course. Credits will not be granted for partial completion of any course.
- B. Successfully meet the state mandated MCAS requirements.

STUDENT PROGRAM REQUIREMENTS

Unless scheduled for an AP course, no student is allowed more than 1 Directed Study block per semester.

PROMOTION

Promotion is based upon credits earned according to the following schedule:

Grade 10	A minimum of	30 credits
Grade 11	A minimum of	60 credits
Grade 12	A minimum of	90 credits

OLD ROCHESTER REGIONAL HIGH SCHOOL GRADUATION REQUIREMENTS 120 CREDIT REQUIRED

ORRHS GRADUATION REQUIREMENTS, 2 YEAR-COLLEGE ACCEPTANCES, AND SCHOOL TO CAREER OPPORTUNITIES		4 YEAR COLLEGES (SELECTIVE/LESS COMPETITIVE)	
<u>ENGLISH</u>	4 YRS (9,10,11,12)	4 YRS	
SOCIAL STUDIES	3 YRS (WORLD HIST., US HISTORY 1 & 2)	3 YRS	
MATH	4 YRS (ALGEBRA 1)	4 YRS (INCLUDING SENIOR YR (BEYOND ALG 2))	
SCIENCE	2 YRS (BIO)	3 YRS (LAB SCIENCE)	
<u>PE</u>	4 YRS		
<u>HEALTH</u>	1 YEAR		
WORLD LANGUAGE		2 YRS	
THE ARTS	1 YEAR (1 YEAR OR 2 SEMESTERS)		
ELECTIVES		2 YRS (ARTS & HUMANITIES OR COMP SCI)	
4 YEAR COLLEGES (COMPETITIVE/HIGHLY COMPETITIVE)			
AP OR HONORS ENGLISH	4 YRS		
AP OR HONORS SOCIAL STUDIES	4 YRS		
AP OR HONORS MATH	4 YRS		
AP & HONORS SCIENCE	4 YRS (BIO, CHEM, PHYSICS)		
WORLD LANGUAGE	4 YRS		
ELECTIVES	2 YRS (ARTS & HUMANITIES OR COMP SCI)		

8

GRADUATION REQUIREMENTS 120 CREDIT REQUIRED

RECOMMENDED TESTS FOR COLLEGE ADMISSION			
PSAT	SOPHOMORE / JUNIOR YEAR - OCTOBER		
SAT	JUNIOR YEAR: SPRING & SENIOR YEAR: FALL		
АСТ	JUNIORS and/or SENIOR YEAR		
RECOMMENDED TESTS FOR HIGH SELECTIVE COLLEGES			
PSAT	SOPHOMORE / JUNIOR YEAR - OCTOBER		
SAT	JUNIOR YEAR: SPRING & SENIOR YEAR: FALL		
AP EXAMS	(AS REQUIRED)		
ACT JUNIOR and/or SENIOR YEAR			
*CAUTION: STUDENTS SHOULD ALWAYS CONSULT THEIR COUNSELOR ABOUT COLLEGE CHOICE!! COLLEGES MAY OR MAY NOT BE FLEXIBLE ABOUT THEIR ADMISSIONS STANDARDS. STUDENTS SHOULD START THIS PROCESS IN THEIR JUNIOR YEAR.			
To access the Program of Studies please visit the High School website at: <u>oldrochester.org/orrhs</u> If you do not have internet access or it you require a paper copy please contact the high school front office			
Additional information and scholarship opportunities can be found on the guidance webpage at <u>https://sites.google.com/oldrochester.org/guidance</u>			

FINE ARTS GRADUATION REQUIREMENT

The Massachusetts Arts Curriculum Framework applies to the study of dance, music, theatre, and the visual arts. In dance, music, theatre, and the visual arts, people express ideas and emotions that they cannot express in language alone. In order to understand the range and depth of the human imagination, one must have knowledge of the arts.

All ORRHS students are required to complete one unit of a fine arts course over their four years to graduate with an ORRHS diploma. This can be done with either a full year course or two half-year courses over four years. The following courses meet the graduation requirement:

ART:

Art 1 Art 2 Honors Art 3 AP Art & Design Ceramics 1 (half year) Ceramics 2 (half year) Drawing and Painting (half year) Photography (half year) Public and Environmental Art (half year) Visual Design (half year) Art History (half year)

ENGLISH LANGUAGE ARTS:

Journalism Theater (half year) Creative Writing (half year)

SOCIAL STUDIES: Philosophy (half year)

MUSIC:

Concert Band Honors Concert Band Honors Jazz Band Mixed Chorus Honors Chorus Honors Contemporary A Capella Beginning Guitar (half year) Music Composition and Theory (half year) Music Technology (half year) Popular American Music (half year)

TECHNOLOGY:

Architectural Design 1 (half year) Architectural Design 2 (half year) Architectural Design 3 (half year) Multimedia Design (half year) Game Design and Development 1 (half year) Game Design and Development 2 (half year) Intro to 3D Design (half year) Intro to CAD Design (half year) Web Design and Development 1 (half year)





AP CAPSTONE

he AP Capstone program is made up of two courses, AP Seminar (offered in grades 10 and 11) and AP Research (offered in grades 11-12). The purpose of AP Capstone is to teach students to consider and evaluate a variety of texts and issues from multiple perspectives. Students will complete inquiry based research and present and defend their findings both orally and textually. Students who complete AP Capstone, as well as at least four other AP courses and score a 3 or higher on the respective exams may earn the AP Capstone diploma.

Grades 10-11	Grades 11-12	
AP Seminar	AP Research	
Completing AP Seminar and AP Research, combined with four AP scores of 3 or higher earns the AP Capstone diploma.		

AP CAPSTONE

159

ADVANCED PLACEMENT SEMINAR LEVEL 5 | 5 CREDITS | FULL YEAR | GRADES 10-11

AP Seminar is a foundational course open to sophomores and juniors that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Oral presentation, group and independent research, essay writing, team collaboration are expectations in this course. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.



160 ADVANCED PLACEMENT RESEARCH LEVEL 5 | 5 CREDITS | FULL YEAR | GRADES 11-12

AP Research is a follow-up to the AP Seminar course, in pursuit of the AP Capstone Certificate or AP Capstone Diploma, and is open to juniors and seniors. Students build upon the skills learned in AP Seminar through a step-by-step process of conducting a comprehensive research inquiry, including the development of a research question, a review of existing literature on their topic, designing an appropriate method to advance their chosen field of inquiry, and analyzing the results/implications of their research. After incorporating these components into a 4,000-5,000-word paper, students prepare a 15-20 minute multimedia presentation and oral defense of their inquiry process. As with AP Seminar, students can draw their topic from virtually any discipline and are given an opportunity to consult with expert advisors within their chosen field of inquiry throughout the process, should the need arise. Ultimately, this course is designed to teach students the detailed processes of scholarly research, including reviewing existing scholarly works, discipline-specific citation and style, seeking necessary approvals, designing and conducting research based on appropriate methodologies, and interpreting the results of collected data. Students must be highly motivated and able to consistently conduct independent research and analysis within the classroom setting and beyond.

> Prerequisite: Successful completion of AP Seminar.





ENGLISH DEPARTMENT

he English Department's mission is to help students become confident, competent, and accurate writers who can respond with voice, detail, style, and imagination to a wide variety of assignments, as well as skilled, analytical, and appreciative readers of all genres of literature. In order to achieve this goal, each of our core courses focuses on an essential question that challenges students to synthesize information from multiple and various sources.

The English Department offers a sequence of courses 9 through 12 designed to prepare students to become skilled and critical readers, writers, speakers, and appreciators of literature. Our courses prepare students for success in demanding college programs, in other post high school programs, in the workplace, and in all facets of their personal and professional lives. OR GRADUATION REQUIREMENTS

4 YEARS (9, 10, 11, 12)

E O fu w cd cl e A T

ENGLISH

Our programs in the high school build on the junior high coursework to offer students a strong and fundamental background in language, in reading, in analysis, in rhetoric and argument, and in research, as well as in the many ways technology allows for further learning, research, and creative expression. English courses in grades 9 through 12 are designed for students to experience at two levels of sophistication and challenge: College-Prep and Honors. The department also offers two Advanced Placement options at the eleventh grade and twelfth grade level – Advanced Placement Language and Composition in Grade 11 and Advanced Placement Literature and Composition in Grade 12.

The curriculum in each grade centers on the following essential questions that guide reading, writing, and course discussion:

- 9TH GRADE: How does man meet the challenges of life's journey? What does the individual learn from success and from failure?
- 10TH GRADE: What is the purpose of storytelling?
- 11TH GRADE: Is man inherently good or evil?
- 12TH GRADE: Who am I? What is my place in the universe?

In all four years, students will gain greater skill and confidence in all aspects of writing – including argumentative writing, research writing, creative writing, anecdotal writing, creative non-fiction, and analytical response writing. The department also offers a varied and engaging array of electives, which students can select in addition to the required four years of English study. The electives are listed and described below in our program of studies. In addition, the department offers instruction, practice, and experience in writing for MCAS, for SAT testing, and for college application essay writing.

COURSE PROGRESSION

GRADUATION REQUIREMENTS					
GRADE 7	GRADE 8	GRADE 9	GRADE 10	GRADE 11	GRADE 12
Grade 7 English	Grade 8 English	English 9	English 10	English 11	English 12
Grade 7 Reading					Creative English
					Monsters, Murder, & Madness
	Honors English 9 Honors I				Multicultural Literature
		Honors English 10	Honors English 11	Media Literacy	
				AP Lang. Composition	AP Lit. and Composition

ELECTIVES - ENGLISH DEPARTMENT			
GRADE 9	GRADE 10	GRADE 11	GRADE 12
*Journalism	*Journalism	*Journalism	*Journalism
Media & Popular Culture	Media & Popular Culture	Media & Popular Culture	Media & Popular Culture
Creative Writing I (half year)	Creative Writing I (half year)	Creative Writing II (half year)	Creative Writing II (half year)
Genealogy (half year)	Genealogy (half year)	Genealogy (half year)	Genealogy (half year)
Sports Media (half year)	Sports Media (half year)	Sports Media (half year)	Sports Media (half year)
*Theater (half year)	*Theater (half year)	*Theater (half year)	*Theater (half year)

*class may be taken more than once for credit.

GRADE 9

Essential Questions that guide reading, writing, and course discussion:

How does man meet the challenges of life's journey?

What does the individual learn from success and from failure?

111 ENGLISH 9 LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 9

English 9 will prepare you for the next three years of high school English classes, as well as set you up for success in both higher education and in the workplace. You will learn how to be effective communicators, in all facets of the English language: readers, writers, speakers, and listeners. You will read, explore, and analyze a wide variety of texts and genres, including novels, memoirs, short stories, poems, and non-fiction. Specifically, you will study: The Odyssey, Romeo and Juliet, The Alchemist, The Boy Who Harnessed the Wind, Beowulf, *and Night.* You will analyze these texts for a deeper meaning, and make connections between the texts and the world around you. Students will use these texts to address the essential questions, which include: How do people deal with conflict in their lives? What tools do authors use to convey their messages? What is the role of a hero in a culture? How do various cultures reward/recognize their heroes? How is one's life affected by outside events and family situations? How can love be defined? How do we develop character through struggle? In the face of adversity what causes some to prevail and some to fail? In the A-level, you will have required reading and writing outside of class.



110 HONORS ENGLISH 9 LEVEL 4 | 5 CREDITS | FULL YEAR GRADE 9

English 9 honors will prepare you for the next three years of high school English classes, as well as set you up for success in both higher education and in the workplace. You will learn how to be effective communicators, in all facets of the English language: readers, writers, speakers, and listeners. You will read, explore, and analyze a wide variety of texts and genres, including novels, memoirs, short stories, poems, and non-fiction. Specifically, you will study: The Odyssey, Romeo and Juliet, The Alchemist, The Boy Who Harnessed the Wind, Beowulf, and Night. You will analyze these texts for a deeper meaning, and make connections between the texts and the world around you. Students will use these texts to address the essential questions, which include: How do people deal with conflict in their lives? What tools do authors use to convey their messages? What is the role of a hero in a culture? How do various cultures reward/recognize their heroes? How is one's life affected by outside events and family situations? How can love be defined? How do we develop character through struggle? In the face of adversity what causes some to prevail and some to fail? In the honors level, you will be required to do more independent reading and writing, as well as work at an accelerated pace.



GRADE 10

Essential Question that guides reading, writing, and course discussion:

What is the purpose of storytelling?

121 ENGLISH 10 LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 10

What is the purpose of storytelling? In English 10, you will navigate a variety of fiction and nonfiction from various time periods and perspectives to explore this question. You will reflect on the stories we tell and the power they have to shape society. You will read such titles as Arthur Miller's *The* Crucible, Chinua Achebe's Things Fall Apart, and F. Scott Fitzgerald's The Great Gatsby, or similar works, as well as selections of poetry and literary nonfiction. Utilizing the process approach to writing, students will compose in a variety of genres with a special emphasis on the argumentative essay. Through the study of these forms of writing and the critical reading of the literature, you will build a solid foundation for success on the MCAS test and in future education. In the college prep course, you will have required reading and writing outside of class.



120 HONORS ENGLISH 10 LEVEL 4 | 5 CREDITS | FULL YEAR GRADE 10

How does society impact the individual? In English 10 Honors, you will navigate a variety of fiction and nonfiction from various time periods and perspectives to explore this question. In this course you will examine the ever-evolving concept of self, and the impact that culture and society have on identity formation. You will be expected to read independently at an accelerated pace, and will study such titles as Nathaniel Hawthorne's The *Scarlet Letter*, Arthur Miller's *The Crucible*; Mark Twain's The Adventures of Huckleberry Finn, Ernest Hemingway's A Farewell to Arms, F. Scott Fitzgerald's The Great Gatsby, and Chinua Achebe's Things Fall *Apart*, as well as selections of poetry and literary nonfiction. Utilizing the process approach to writing, you will compose in a variety of genres with a special emphasis on the argumentative essay. Through the study of these forms of writing and critical reading of the literature, students will build a solid foundation for your success on the MCAS test and in future education. In the honors level, you will be required to do more independent reading and writing, as well as work at an accelerated pace.

Prerequisite: Teacher recommendation



GRADE 11

Essential Question that guides reading, writing, and course discussion:

Is man inherently good or evil?

132 ENGLISH 11 LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 11

In this course, you will analyze your life as it relates to the study of literature and non-fiction. Through multiple texts, projects and writing assignments, you will develop the skills necessary to prepare for college level courses. Through critical readings of works such as *Macbeth, Lord of the Flies, Brave New World, In Cold Blood* and *The Canterbury Tales,* you will examine symbolism and theme. You will study rhetoric and develop your own writing style. You will practice SAT essay writing, develop a literary critique and complete a college resume. By the end of this course, you will learn to read, write and think on a higher level.

130 HONORS ENGLISH 11 LEVEL 4 | 5 CREDITS | FULL YEAR GRADE 11

In this challenging course, you will read and write extensively. Through the study of British Literature you will learn to read in Middle English, analyze multiple Shakespearean texts and write literary criticism. You will be expected to read at an accelerated pace, and you will often read and write about multiple texts concurrently. At the same time, you will prepare for the SAT and the college admission process. You will discuss literature at the college level, complete advanced and extensive assignments and master your own writing style.

Prerequisite: Teacher recommendation

131 ADVANCED PLACEMENT LANGUAGE AND COMPOSITION LEVEL 5 | 5 CREDITS | FULL YEAR GRADE 11

AP English Language and Composition is an introductory college-level course designed to help students become skilled readers of prose written in a variety of rhetorical contexts. Students will read texts from multiple genres including fiction, drama, and poetry; however, the majority of texts will be prose non-fiction. Some of the longer texts students will read include Truman Capote's non-fiction novel In Cold Blood, Shakespeare's play Macbeth, Aldous Huxley's novel Brave New World, and John Howard Griffin's investigative memoir *Black Like Me.* The course features an intensive study of many shorter texts, including essays and opinion pieces from publications such as The New York Times and other reputable periodicals, speeches, letters, political cartoons, visual texts, graphs, and excerpts from longer works of non-fiction. The course also helps students become skilled writers who can employ rhetorical strategies appropriate for a given audience and purpose. Thus students will write extensively in a variety of genres, for a variety of audiences, and to serve a variety of purposes. Through their writing, students will be challenged to explore significant issues of personal, local, national, and global importance. They will produce many expository, analytical, and argumentative compositions that introduce a complex central idea and develop it with appropriate evidence drawn from primary and/or secondary sources, and cogent explanations. Students will move effectively through the stages of the writing process, with careful attention to inquiry and research, drafting, revising, editing and review.



GRADE 12

Essential Questions that guide reading, writing, and course discussion:

Who am I?

What is my place in the universe?

Honors Credit in English 12

Why honors? Students choosing the honors option should possess a passion for the subject and a desire to challenge themselves beyond the general curriculum requirements. Honors students should demonstrate integrity and leadership in the classroom. Through completion of parallel and additional coursework, students will be challenged to think more independently and work toward more complex literary interpretation.

What is honors work? Honors work demonstrates that a student has delved more deeply into methodology, structure, and/or theory; addressed more sophisticated questions; and satisfied more rigorous standards. The content of an honors assignment can be one of two things: broader in scope or deeper in examination than in a comparable assignment.

Beyond the regularly assigned work, honors students will be required to spend additional time outside of class to complete their assignments.

In the event a course is run, multi-level, i.e. students can earn honors or A level credit, by the end of each term, honors students will:

- complete an outside reading assignment or project. Books selected for this project must come from the designated honors level list or be approved by the teacher.
- complete an additional writing assignment which will be chosen from a list of designated honors level prompts.
- lead or share leadership of at least one small or large group class discussion.
- interact with other students pursuing the honors option through online forums to participate in seminar discussions scheduled outside of class.
- demonstrate leadership qualities in the classroom and model positive habits of mind and productive habits of work.

In addition, honors students will create a portfolio of their work and submit a 2--page reflection paper at the end of each term that clearly and thoroughly communicates how they specifically met these honors criteria.

141 ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION LEVEL 5 | 5 CREDITS | FULL YEAR GRADE 12

This is a rigorous, college-level course. The reading is challenging, and the writing is frequent and requires an independent mind. The theme for the year is the examination of how various works of literature answer the two philosophical questions: Who Am I? and What is My Place in the Universe? The works, covering a wide range from Greek tragedy (Oedipus) to contemporary fiction (The Kite Runner), will include short stories, plays, novels, non-fiction, and poetry. The course is heavily analytical in nature and prepares you to do independent literary analysis. Through a close reading of texts, you will develop perceptive reading strategies and explore a variety of traditional and contemporary methods of literary analysis. You will enhance your writing skills through frequent, challenging assignments and further develop your individual voice and writing style. You will also prepare for the AP Literature and Composition Exam through the completion of on-demand writing prompts and multiple-choice selections.

142 ENGLISH 12A LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 12

This twelfth grade college prep course will focus on building and refining the communication skills of effective speaking, writing, presenting, and critical listening valued in college, all professions, and the community beyond high school. Through reading of fiction and non-fiction and teacher-directed and student-created projects, students will further develop their inquiry and research skills, time management skills, and problem solving skills while exploring the senior essential questions, "Who am I? What is My Place in the Universe?"

Students will complete personal narratives in preparation for writing the college application essay or personal statement. They will work with their classmates on collaborative projects throughout the year building their interpersonal skills. The year will culminate with an individual senior research project that includes a research component, a written component, and a professional style presentation.

140 HONORS ENGLISH 12 LEVEL 4 | 5 CREDITS | FULL YEAR GRADE 12

Who are you? What is your place in the universe? Find out through a philosophical exploration of world literature that focuses on these two essential questions. The works, covering a wide range from Greek tragedy to contemporary drama, will include poetry, short stories, plays, and novels. Emphasis will be on completing a variety of writing assignments and the further development of your individual writing style. You will closely evaluate literary theme and write literary criticism. In addition, this honors course requires you to complete a wide variety of reading and writing assignments outside of class. You will complete a series of personal "Who am I?" reflections and learn how to write the college application essay during the first quarter of the course. You and a team of your choice will complete a "Who Am I and What is my Place in the Universe ?" project and present it to your classmates during the second guarter. Your year will culminate with the senior research project that will include research, a written component and a multi-media presentation.

Prerequisite: Teacher recommendation





Prerequisite: Teacher recommendation



GRADE 12

Each course listed on these two pages are available for both regular (Level 3) and honors credit (Level 4)

See previous page for further information

149 CREATIVE ENGLISH 12 LEVEL 3 or 4 | 5 CREDITS | FULL YEAR GRADE 12

In this course, students will explore the essential questions, Who am I? and What is my place in the universe? from a creative perspective. This project-based course is designed for students who want to further their artistic, musical, dramatic, creative writing abilities, talents, or interests. The course centers around developing and refining the twenty-first century skills, including:

- collaboration and teamwork
- creativity and imagination
- critical thinking
- problem solving.

The reading covers a wide range from novels and plays to memoirs and poetry. Emphasis will be on completing a variety of writing assignments and the further development of students' individual writing styles. Students will complete a series of personal "Who am I?" reflections in preparation for the college application essay, work with classmates on the "Who are we?" team project, and complete a senior research project and presentation. Students are expected to participate in discussions and to be actively involved in group work. Students will be required to spend additional time outside of class to complete their assignments.



163 ENGLISH 12: MONSTERS, MURDER, & MADNESS LEVEL 3 or 4 | 5 CREDITS | FULL YEAR GRADE 12

In this course, students will explore the monster and/or the monstrous in literature, film, and other mediums. Students will explore the overarching senior essential questions, "Who am I?" and "What is My Place in the Universe?" while questioning what it means to be human through what they read, write, and view throughout the year. Students will explore the depths of the human mind and the psychological aspects of human nature. By the end of the course, students will understand how cultures create fictional monsters to highlight our own human instincts. Emphasis will be on completing a variety of writing assignments and the further development of students' individual writing styles. Students will complete a series of personal reflections leading up the college application essay, the Who am I? What is my place in the universe? team project, and an individual senior research project. Works covered will include Frankenstein, Hamlet, One Flew Over the Cuckoo's Nest, 1984, Of Mice and Men, selected memoirs, poems and works of Stephen King. Students are expected to participate in discussions and to be actively involved in group work. Students will be required to spend additional time outside of class to complete their assignments.



169 ENGLISH 12: MEDIA LITERACY LEVEL 3 or 4 | 5 CREDITS | FULL YEAR GRADE 12

We are constantly bombarded by media messages. News, entertainment, and social media outlets want to sell us everything from products and services to lifestyles and ideologies. In this twelfth grade English course, students will examine their complex relationship with mass media and explore how to maintain their individual identities in the face of constant media influence. This exploration will be grounded in current events, popular culture, and literature, and will require students to both assess and create media messages in the worlds of journalism, entertainment, literature, and social media. As students explore their identity within the media landscape, they will complete a series of personal "Who am I?" reflections and develop college application essays. Students will also bring the lessons from their media exploration to their work with their classmates on the "Who am I? What is my place in the universe?" team project during term two. The vear will culminate with the senior research project and presentation. In this college preparation course, students should expect to complete required reading and writing outside of class.



172 ENGLISH 12: MULTICULTURAL LITERATURE LEVEL 3 or 4 | 5 CREDITS | FULL YEAR GRADE 12

In this course, students will use a multicultural lens to explore literature that focuses on the two essential questions 'Who am I?" and "What is My Place in the Universe?" This course is designed for students who are are interested in discussing and exploring the texts we read through multiple perspectives, including but not limited to queer theory, gender studies, post colonial theory, and feminist theory. The assessments in the course, in addition to all the English 12 required writing assignments, will be focused on exploring the texts we read using multiple lenses. Students are encouraged to explore their own experiences and how they impact their individual interpretations of the texts. The reading list covers a wide range of works from I Know Why the Caged Bird Sings, to Frankenstein, to 1984, and will include short stories, plays, and novels. Student choice and voice will be at the center of this course, so in addition to covering some whole class novels, students will also be choosing their own texts from pre-approved lists as part of thematic units. Students will complete a series of personal "Who am I?" reflections and learn how to write the college application essay during the first quarter of the course. Students will work with their classmates on the "Who am I? What is my place in the universe?" team project during term two. The year will culminate with the senior research project and presentation. In this college preparation course, students should expect to have required reading and writing outside of class.

again mountains and streams and all the wondro Nature adorns her chosen dwelling-places.

We had arrived in England at the beginning of now February. We accordingly determined to cotowards the north at the expiration of ano expedition we did not intend to follow the grebut to visit Windsor, Oxford, Matlock, and the resolving to arrive at the completion of this to Taly. I packed up my chemical instruments an collected, resolving to finish my labours in som northern highlands of Scotland.

We quitted London on the 27th of March and at Windson fambling in its beautiful forest. This is mountaineers, the majestic baks, the quant herds of stately deer were an novelites to us. From thence we proceeded to Oxford. As we minds were filled with the remembrance of the transacted there more than a century and a hat that Charles I. had collected his forces. This faithful to him, after the whole nation had forss the standard of Parliament and liberty. The unfortunate king and his companions, the a insolent Goring, his queen, and son gave a peopart of the city which they might be supposed to the supposed to the

rue

Victor

spine of elder days found a dwelling here, and its footstep. If these feelings had not f a frame in the opearance of the city had y body to obtain our admiration. The colle prome net the steets are almost magnificent which flow beside it through meadows of spread forth into a placid expanse of water

majestic assemblage of towers, and spires, and among aged trees.

1 enjoyed this scene, and yet my enjoyment by the memory of the past and the anticipation formed for peaceful happiness. During my you never visited my mind, and if I was ever ove sight of what is beautiful in nature or me study and sublime in the productions of man could heart and communicate elasticity to my spirite tree the bolt has entered my soul fand I felt ther to exhibit what I shall soon cease to be a me wrecked humanity pitiable to others and intolem

We passed a considerable period at Oxford environs and endeavouring to identify every sp to the most animating epoch of English history discovery were often prolonged by the suc presented themselves. We visited the tom Hampden and the field on which that patriot fo soul was elevated from its debasing and contemplate the divine ideas of liberty and s these sights were the monuments and the re instant I dared to shake off my chains and look

ELECTIVES

GRADES 9-12

- Creative Writing
- *Journalism
- Genealogy
- Sports Media
- *Theater
- Media & Popular Culture

*class may be taken more than once for credit.

114 JOURNALISM LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 9-12

In this course you will become a journalist. You will not only become a student of Journalism, but you will also become a writer and a member of a staff that creates *Paw Prints*, the school newspaper. This class will offer you a practical, hands-on, rather than a theoretical exploration of journalism. You will learn the organization of a newspaper and its staff, as well as how to write all types of newspaper stories, articles, and features. You will also have the opportunity to work on photography for the newspaper, as well as creative writing. All students in this course become involved in producing the school newspaper and learn to follow the ethics of professional journalism. You will also be able to assume leadership positions on the staff, such as Section Editor, Photo Editor, or Layout Editor. You will be encouraged to learn layout through the InDesign layout software, which is made available to Journalism students. You may continue in Journalism for multiple years. Seeing the newspaper in print and distributed to fellow students and teachers is an exciting experience. The Journalism course is an elective within the English Department taken in addition to, and not replacing, your English course.



164 MEDIA & POPULAR CULTURE LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 9-12

Have you ever wished you were part of the creative team behind your favorite television show, movie, album, or video game? Have you ever labored to perfect a social media post or been ambushed by targeted advertising? Have you ever seen your friends, family, and acquaintances share misinformation without considering the consequences? In this ever-evolving course, you will learn how to analyze and interpret media messages, assess their value, and apply those lessons to media vou create on your own. You will review film, television, video games, music, and social trends in personalized media blogs, pitch your own entertainment and advertising concepts, and get hands-on experience developing the student newspaper. You will also have the opportunity to assume leadership positions on the newspaper staff and practice the principles of layout & design. Other major parts of the course include an extensive film study unit in which you will learn about cinematography, editing, screenwriting, etc.; an investigation into the best practices for maintaining your social media presence; and the development of a final, personalized media project that reflects your skills and interests. This elective course is designed for students in all grades.



165 CREATIVE WRITING LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

Do you love writing and want to practice your craft? Have you ever wanted to write a book? Do you want to be a published writer? In this half year English elective, you will write in a supportive workshop atmosphere. Throughout the course, you will develop your writing style as you explore the work of published writers, share your own writing, and respond to various writing prompts. Through the art of peer editing and peer evaluation, you will collaborate with your classmates in order to improve your writing style and learn new techniques. Working from advanced models, you will experiment with writing various types of poetry and prose. You will learn to submit your own writing to various publications such as Teen Ink and The Marble Collection. This course will culminate in a publication that will feature the works of students in the class as well that of other students.

116 THEATER LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

In this half-year English elective, you will collaborate with actors, directors, stage managers and artists to produce a play. Whether you decide to design, direct, assist or star in the production, you will develop the skills necessary to prepare a show by the end of the semester. You will explore theater spaces, character motivation and improvisation to fully understand your theater experience. Whether you are a veteran or novice, you will enhance your skills as you work with your peers to complete a successful performance.

156 GENEALOGY LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

Have you ever wanted to research your family history? Do you wonder if you have famous ancestors? In this half year English elective, you will use local and digital resources to discover your family's origin. As you investigate your roots, you will embark on a rewarding journey of self discovery and ultimately publish your own family genealogy.





161 SPORTS MEDIA LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

Sports Media is based on the idea that many students are interested in sports and could eventually turn this passion into a career. There is a difference in having an interest in something and having a polished means of conveying your knowledge in an area, and this course will focus on developing the latter.

For the first 14 weeks, students will spend time looking at different types of media in which sports can be presented. Starting with print and moving to the audio and visual, students will take their own experiences playing sports, their viewing of school events and professional contests, and develop narratives in a clear, professionally presented manner. The ability to gather data, analyze the results, organize their findings, and present a finished product will all be tested. Students will be required to present their findings in writing as well as audibly, and public speaking will be a component.

Over the last 6 weeks, students will take the media they are most interested and produce a collection of assignments for their final. For example, one student interested in the print portion could produce a collection of essays about a particular sport or event. Another could record a series of podcasts analyzing soccer, while another, interested in sports casting, could film a b-roll segment of their reporting.

Throughout the course, students will be required to stay up-to-date on current happenings in the sports world and will be put on the spot to give analysis of recent happenings.



MATHEMATICS DEPARTMENT

he Mathematics Curriculum of Old Rochester Regional High School enables all students to gain and apply mathematical knowledge, to think and communicate effectively, to work and be a contributing member of an ever-changing society. To accomplish this, problem solving will be the focus of all mathematics classrooms where you are provided opportunities to deepen your understanding of mathematics and its applications. You will learn mathematics in a supportive environment that provides interdisciplinary connections, uses appropriate technology and encourages independent as well as collaborative practices.

Technology allows all students to explore complex mathematical topics and applications early in their learning experiences. Technology at all levels should be used as both a tool and a tutor.

OR GRADUATION REQUIREMENTS

4 YEARS

It is our obligation to use available technologies as teaching tools if our students are to have every advantage and if they are to successfully attain their goals for college and careers in our technological world. Technology, however, should not be used to replace the knowledge of basic computational facts or algebraic manipulations. It should be used to enhance student learning and understanding, to simplify complex problems, and to provide students the opportunity to make connections between different mathematical representations.

Graphing calculators are an integral part of the learning process in high school mathematics courses and students are required to have a graphing calculator available for their personal use. Teachers instruct students using the Texas Instruments' TI-84+ and students are encouraged to purchase either TI-83+ or TI-84+. Students who demonstrate a financial hardship can make arrangements with an administrator to sign out a calculator for the school year.

All levels of mathematics courses prepare students for college. Students in a particular course follow the same curriculum with varying degrees of pace, depth and breadth based upon their level of mathematical development.

- In college preparatory, students are expected to complete independent work and to explore mathematical topics deeply and at a fast pace. Coursework at the college prep level will prepare students for precalculus or calculus in college.
- Students working at the Honors level are exposed earlier to the abstract nature of mathematics and they are expected to apply concepts to new situations and non-routine problems. The honors level will move at a faster pace and students are expected to complete more work outside of class. Coursework at the Honors level will prepare students for college calculus.
- Advanced placement courses are offered in Calculus and Statistics. These courses require a substantial amount of independent work. Coursework is equivalent to one semester of college level mathematics. Both courses prepare the students for the AP exam. Students may receive credit at some universities and colleges.

32

COURSE PROGRESSION

MATHEMATICS

MATHEMATICS CORE CLASSES			
YEAR 1 - ALGEBRA 1	YEAR 2 - GEOMETRY	YEAR 3 - ALGEBRA 2	
Algebra 1	Geometry	Foundations of Algebra 2	
		Algebra 2	
Algebra (taken in 8th grade)	Honors Geometry	Honors Algebra 2	
Following the completion of Algebra 2, students may choose a course in precalculus or Finite Math and Statistics			

ELECTIVES - MATHEMATICS DEPARTMENT			
GRADE 9	GRADE 10	GRADE 11	GRADE 12
		Advanced Algebra with Precalculus Precalculus Honors Precalculus AP Statistics	Finite Math and Statistics Advanced Algebra with Precalculus Precalculus Calculus AP Statistics AP Calculus

411 ALGEBRA I LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 9

This course is designed for students who have a solid foundation of basic skills and wish to begin fulfilling mathematics requirements for college entrance. Much of your focus this year will be analyzing linear relationships through graphing, examining tables, and solving equations. In addition, you will explore quadratic and exponential functions and perform operations with polynomials. You will analyze data and write mathematical models to make predictions for real world situations. You will be expected to justify your reasoning verbally and in writing throughout the year. Extensions will lead to an informal understanding of radicals and connections to geometry. Upon completion of this course, you will be prepared for further study in Geometry and Algebra 2.

412

ALGEBRA LAB PASS/FAIL | 2.5 CREDITS | FULL YEAR GRADE 9

Students will enroll in this course concurrently with Algebra 1. Having a strong foundation in Algebra is important for future success in all math courses. Students will have more time to process and practice the new concepts that they are learning in their Algebra 1 course in a supportive, small group setting. You will have opportunities to explore concepts using different approaches: graphing calculator, software, hands on tools, and explorations. Students will engage in interesting problem-solving activities, use mathematics to model situations in the real world, and communicate what they are learning. This is a pass/fail course.

421 GEOMETRY LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 9-10

This course is designed for students who have successfully mastered the topics of Algebra I. You will apply your algebraic skills to geometric concepts. You will write informal proofs using logical reasoning in conjunction with geometric theorems and definitions. You will discover the relationships and properties of polygons and solids by exploring congruent and similar figures, parallel lines, and analytic geometry. Upon completion of this course, you will have knowledge of geometric concepts and an understanding of inductive and deductive reasoning.

Prerequisite: Successful completion of Algebra 1

410 HONORS GEOMETRY LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 9-10

This course is designed for students who have a mastery of algebraic skills. You will develop both inductive and deductive reasoning skills. Teacher presentations will be rigorous and demanding. You will construct formal proofs that focus on triangles, quadrilaterals, circles and other polygons. You will be introduced to analytic and transformational geometry. Upon completion of this course, you will have a solid foundation in Euclidean geometry.

Prerequisite: An average grade of B- in Honors Algebra I at the junior high school or an A average in Algebra I. Teacher recommendation required.

425 GEOMETRY LAB PASS/FAIL | 2.5 CREDITS | FULL YEAR GRADE 10

Students will enroll in this course concurrently with Geometry. To maintain the strong foundation students have in algebra, you will apply algebraic knowledge to geometric concepts. Students will have more time to process and practice the new concepts that they are learning in their Geometry course in a supportive, small group setting. You will have opportunities to explore concepts using different approaches: graphing calculator, software, hands on tools, and explorations. Students will engage in interesting problem-solving activities, use mathematics to model situations in the real world, and communicate what they are learning. This is a pass/fail course.



436 FOUNDATIONS OF ALGEBRA II LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 11

This course is designed for the mathematics student who desires to learn the basics of Algebra in a more deliberate and hands-on manner. This course is available to students who have completed Geometry A. You will build upon your understanding of linear functions from Algebra I and explore quadratic, exponential and polynomial functions. You will review factoring as it relates to adding, subtracting, multiplying and dividing rational expressions as well as with new families of functions including radical and logarithmic functions. You will expand your use of technology to analyze graphs, tables, and equations. As you look at various mathematical models, often times representing real data, you will develop your reasoning skills as you make decisions and predictions. This course will prepare you for college entrance exams for two or four-year colleges.

Prerequisite: Teacher recommendation required.



431 ALGEBRA II LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 10-11

In this course you will build upon your understanding of linear functions and expand your knowledge of exponential, quadratic, and polynomial functions. You will be introduced to absolute value, radical and logarithmic functions. You will examine families of functions in detail through explorations. Emphasis will be placed on analyzing real world applications through graphs, tables, and verbal models, as well as collecting and interpreting data. The complex number system will be introduced. Additional topics might include arithmetic and geometric sequences.

Prerequisite: Successful completion of Algebra I

420 HONORS ALGEBRA II LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 10-11

This is a demanding and rigorous course for students intending to continue in precalculus and calculus at the high school level. You will expand your study of quadratic and exponential functions and explore logarithmic, and rational functions. Emphasis will be placed upon the ability to work with complex algebraic manipulations. You will use graphs and tables to analyze data and create algebraic models to solve problems.

Prerequisite: A final grade of B- in Honors Geometry or an A average in Algebra I and Geometry. Teacher recommendation required.

461 FINITE MATHEMATICS AND STATISTICS LEVEL 3 | 5 CREDITS | FULL YEAR

GRADE 12

In this course you will be introduced to statistics by producing data through random samples, experiments and simulations. You will explore and analyze data by using graphical and numerical techniques to study distributions and departures from patterns. You will use models to make predictions and assess the likelihood of specific outcomes. You will also be introduced to a variety of advanced topics in mathematics that include a heavy focus on business applications of optimization problems. You will also understand and apply combinatorics to solve advanced counting problems and use probability and logic to solve real word problems. Lastly, you will be introduced to finance and study various types of investments.

Prerequisite: Successful completion of Algebra II.

444

ADVANCED ALGEBRA WITH PRECALCULUS LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 11-12

In this course you will further develop your understanding functions and other precalculus concepts. You will display, describe, transform, and interpret numerical information represented as data, graphs, or equations. You will analyze data using regression formulas to create algebraic models. You will thoroughly explore trigonometric functions as both circular and triangular relationships.

Prerequisite: A final grade of C or better in Algebra II. Teacher recommendation required.

445 PRECALCULUS LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 11-12

In this course you will explore and solve real world applications of various functions including polynomial, rational, exponential, logarithmic, and trigonometric functions. You will look deeply at all aspects of trigonometry including triangles, the unit circle, periodic functions, identities, and analytic geometry. You will continue to strengthen your algebraic manipulation skills. Mathematical thinking, including work with proof and logic, will be a theme throughout the course.

Prerequisite: A final grade of C or better in Advanced Algebra with Precalculus or teacher recommendation.

430

HONORS PRECALCULUS LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 11-12

Honors Pre-calculus is a rigorous course intended for students preparing to take AP Calculus in high school or calculus in college. You will explore and solve real world applications of various functions including polynomial, rational, exponential, and logarithmic and trigonometric functions. You will take an in-depth look at all aspects of trigonometry including triangles, the unit circle, periodic functions, identities, vectors and analytic geometry. Additional topics include sequences, series, conic, probability and limits. If you are planning a career in mathematics, science, engineering, or related fields, you should consider this course.

441 CALCULUS LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 12

This course is designed for students who have strong algebra skills and a good understanding of polynomial, exponential, logarithmic and trigonometric functions. Manipulations and applications of limits, derivatives and integrals will be introduced to you at a basic level. You will solve problems with and without graphing calculators.

Prerequisite: A grade of B or better in Pre calculus. Teacher recommendation required

440

ADVANCED PLACEMENT CALCULUS AB LEVEL 5 | 5 CREDITS | FULL YEAR GRADE 12

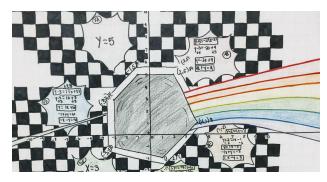
This course is designed for students who have a thorough knowledge of college preparatory mathematics, including algebra, analytic geometry, and trigonometry. You will manipulate and compare graphical, numerical and algebraic representations in differential and integral calculus. You will explore, in depth, the rate of change in functions and area under curves. The course focuses on conceptual understanding and critical thinking skills. You will solve problems with and without a graphing calculator.

Prerequisite: A final grade of B in Honors Pre calculus or teacher recommendation.

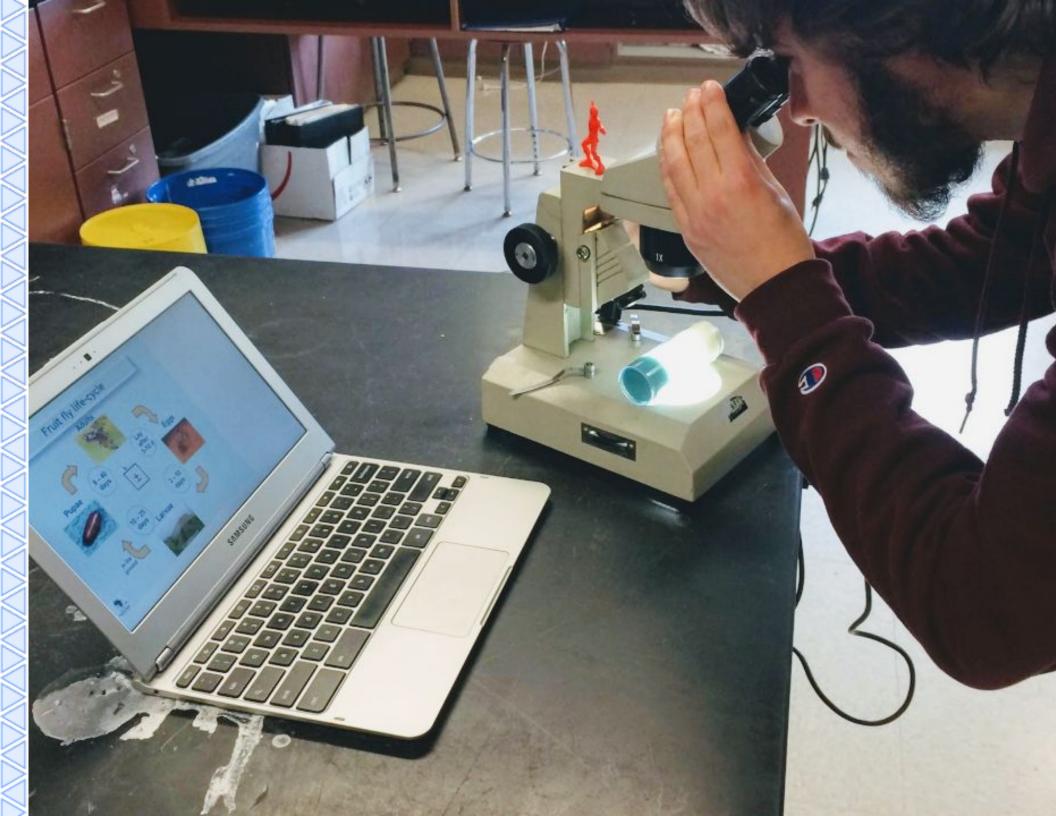
439 ADVANCED PLACEMENT STATISTICS LEVEL 5 | 5 CREDITS | FULL YEAR GRADES 11-12

This course is designed for students who will take this course as an elective after having completed Algebra II Honors or Precalculus. You will experience a college level, introductory course in statistics. You will explore data by describing patterns and departures from patterns, analyze sampling distributions, plan and conduct a study, and explore random phenomenon using probability and simulation. Statistical inference provides the methods to help you estimate population parameters and draw conclusions about a population from sample data. With the increased emphasis in the use of statistics in all departments at the college/university level, there is a high expectation that all majors will benefit from the topics and the problem solving strategies introduced by a course in statistics. The AP Statistics syllabus will be followed.

> Prerequisite: A final grade of B or better in honors level Algebra II or B+ in Advanced Algebra with Precalculus. Teacher recommendation required.



72 $J(x) = x^3 - dx^2 - 5x + 6$ E - 6-4. 2 14 - 14 - 70 - 12 - 124 - 12 - 124 - 12 - 124 - 12 - 124 8 48 1 4= 14 432 36 ..



SCIENCE & TECHNOLOGY DEPARTMENT

he Science Department seeks to provide you with a firm conceptual foundation in Biology, Physics, and Chemistry. As a ninth grade student, you are required to begin your high school career in Biology and are encouraged to continue with courses in chemistry and physics. In addition, programs are offered in a variety of related fields where you can apply your foundation of scientific knowledge in an interdisciplinary approach of the scientific disciplines. You are urged to take science courses that match your interest, ability, and career goals during each of your four years at Old Rochester Regional High School.

The Commonwealth of Massachusetts mandates that all high school students pass one MCAS Science and Technology/Engineering Test prior to graduation. In response, Old Rochester Regional High School requires all ninth graders to take the Biology MCAS examination at the end of their freshman year

OR GRADUATION REQUIREMENTS

2 YEARS (Biology plus one full year of a lab science)

As a student, you may enroll in College Preparatory, Honors and Advanced Placement courses depending on your academic ability and completion of specific prerequisites. The distinction among the four levels is the degree to which you are able to work independently and integrate information to form conclusions.

- In College Preparatory courses, you are expected to work on laboratory investigations and use previously learned concepts and skills to analyze and evaluate data, but with more instructor input and guidance.
- In Honors courses, you are expected to work on laboratory investigations with minimal assistance from the instructor and use concepts and skills previously learned to analyze and evaluate information as well as design and create new hypotheses.
- In Advanced Placement courses, you are expected to meet the standards of those in Honors level. You will be required to complete a substantial amount of independent work including a lengthy summer assignment. Coursework is equivalent to an introductory college level course. You will be prepared for and expected to take the AP exam.



COURSE PROGRESSION

SCIENCE CORE CLASSES				
GRADE 7	GRADE 8	GRADE 9	GRADE 10	GRADES 11 & 12
7th Grade Science	8th Grade Science	Biology	Chemistry	Any elective
			Honors Chemistry	
			Marine Biology	

ELECTIVES - SCIENCE DEPARTMENT			
GRADE 10	GRADE 11	GRADE 12	
Earth Science Marine Biology Environmental Interactions (half year) Forensics (half year)	Earth Science Marine Biology Environmental Interactions (half year) Forensics (half year) Honors Forensic Science (Lab) Genethics (half year) Human Anatomy and Physiology 1 Honors Human Anatomy and Physiology 1 Physics Honors Physics *Honors Organic Chemistry AP Biology AP Chemistry AP Environmental Science AP Physics 1 Intro to Epidemiology (half year)	Earth Science Marine Biology Environmental Interactions (half year) Forensics (half year) Honors Forensic Science (Lab) Genethics (half year) Human Anatomy and Physiology 1 Honors Human Anatomy and Physiology 1 or 2 Physics Honors Physics *Honors Organic Chemistry AP Biology AP Chemistry AP Environmental Science AP Physics 1 Intro to Epidemiology (half year)	

*Honors Organic Chemistry and AP Chemistry is offered in alternating years.

COURSE PROGRESSION

TECHNOLOGY ELECTIVE CLASSESGRADES 9-12GRADES 10-12AP Computer Science Principles (full year)AP Computer Science AEngineering Design 1 (half year)AP Computer Science ARobotics Engineering 1 (half year)Cybersecurity 1 (half year)Robotics Engineering 2 (half year)Cybersecurity 2 (half year)Architectural Design 1 (half year)Engineering Design 2 (half year)Architectural Design 2 (half year)Engineering Design 2 (half year)Architectural Design 2 (half year)Engineering Design 3 (half year)Introduction to CAD (half year)Game Design and Development 2 (half year)Introduction to 3D Design (half year)Game Design and Development 1 (half year)Computer Science for All (half year)Web Design and Development 1 (half year)Multimedia Design (half year)Web Design and Development 1 (half year)		
AP Computer Science Principles (full year) Engineering Design 1 (half year) Robotics Engineering 1 (half year) Robotics Engineering 2 (half year) Architectural Design 1 (half year) Architectural Design 1 (half year) Architectural Design 2 (half year) Architectural Design 2 (half year) Introduction to CAD (half year) Introduction to 3D Design (half year) Computer Science for All (half year) Computer Science for All (half year) Computer Science for All (half year) Robotics Engineering Design and Development 1 (half year) Science for All (half year) Carl Design and Development 1 (half year) Science for All (half year) Architectural Design and Development 1 (half year)	TECHNOLOGY E	LECTIVE CLASSES
AP Computer Science AEngineering Design 1 (half year)Robotics Engineering 1 (half year)Robotics Engineering 2 (half year)Architectural Design 1 (half year)Architectural Design 1 (half year)Architectural Design 1 (half year)Architectural Design 2 (half year)Architectural Design 2 (half year)Introduction to CAD (half year)Introduction to 3D Design (half year)Computer Science for All (half year)Web Design and Development 1 (half year)Web Design and Development 1 (half year)	GRADES 9-12	GRADES 10-12
	Engineering Design 1 (half year) Robotics Engineering 1 (half year) Robotics Engineering 2 (half year) Architectural Design 1 (half year) Architectural Design 2 (half year) Introduction to CAD (half year) Introduction to 3D Design (half year) Computer Science for All (half year)	Architectural Design 3 (half year) Cybersecurity 1 (half year) Cybersecurity 2 (half year) Engineering Design 2 (half year) Engineering Design 3 (half year) Game Design and Development 2 (half year) Game Design and Development 1 (half year)

CORE CLASSES

GRADE 9

- Biology

GRADE 10

- Chemistry *
- Honors Chemistry*
- Marine Biology*

*Recommended for college bound students

521 BIOLOGY (LAB) LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 9

In this course, you will examine the many variations in the fundamental theme of life and the individual's role in the biosphere. Coherence of concepts is achieved by structuring the materials around a series of major topics. We will discuss science as inquiry, evolution, regulation and homeostasis, diversity of types and unity of pattern; the complementary relationship between organisms and environment; differentiation of structure and function; genetic continuity of life; biological basis of behavior; and the history of biological concepts. You will demonstrate understanding of the scientific method by collecting and analyzing data during lab investigations. At the end of the ninth grade, you are required to take the Biology MCAS examination.

520 HONORS CHEMISTRY (LAB) LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 10-12

The purpose of this course is to give you an introductory knowledge of the broad concepts and models upon which modern chemistry rests and enough of the traditional chemistry course to understand the everyday chemical world. The course employs the inquiry approach and the scientific method. Emphasis is placed on mathematical problem solving and student-conducted demonstrations.

Prerequisite: Minimum of a B in Algebra I and it is strongly recommended that the student be concurrently enrolled in Algebra II. Teacher recommendation required.

532 CHEMISTRY (LAB) LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 10-12

This course in elementary chemistry is designed to satisfy, in part, the laboratory science graduation requirement, and to serve as the subject matter basis for more advanced science courses. Successful completion of Algebra I is required. You will consider two essential questions in this class: (I) what are the varieties of material substances in the world? (2) What are the types of changes these substances undergo? Subject matter is developed around 45-50 laboratory investigations. Assessment of student performance is based on (a) Student laboratory reports, (b) Examinations (based on the laboratory reports), (c) Efficiency of lab time utilization (d) Independent research. You will be expected to create hypotheses, to write and reason logically, and to test hypotheses by well thought out study of experimental data. The Socratic (questioning) Method is used by the instructor to involve students actively in the processes of learning. The subject matter is interrelated with global and local considerations whenever possible. Sources include: Addison-Wesley Chemistry, and a variety of other texts are used as sources of specific information. Scientific journals, and Internet sources are used as appropriate to enrich sources for learning.



ELECTIVES

GRADES 10

- Earth Science
- Environmental Interactions
- Marine Biology
- Forensics

GRADES 11-12

- Earth Science
- Environmental Interactions
- Marine Biology
- Forensics
- Honors Forensic Science
- Genethics
- Human Anatomy and Physiology 1
- Honors Human Anatomy and Physiology 1
- Honors Human Anatomy and Physiology 2
- Physics
- Honors Physics
- *Honors Organic Chemistry
- AP Biology
- *AP Chemistry
- AP Environmental Science
- AP Physics 1
- Intro to Epidemiology

*Honors Organic Chemistry and AP Chemistry are offered on alternating years

541 PHYSICS (LAB) LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 11-12

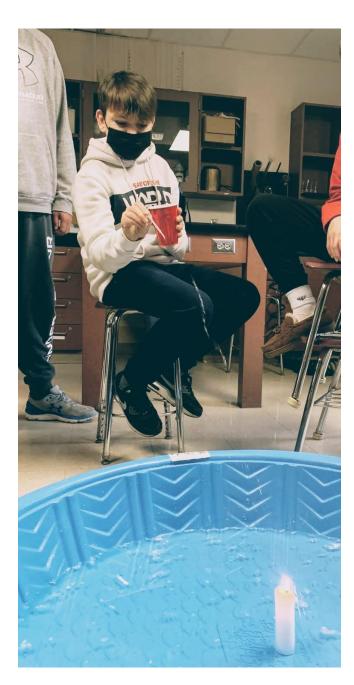
This physics course introduces you to many of the fundamental physical principles of nature and their supporting mathematical descriptions. You will gain insights into the behavior of matter, energy, and related physical systems. You will participate in classroom discussions, critical problem solving, laboratory activities and their evaluation, and creative special projects.

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

550 HONORS PHYSICS (LAB) LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 11-12

This physics course introduces you to many of the fundamental physical principles of nature and their supporting mathematical descriptions and derivations. You will gain higher-level insights into the behavior of matter, energy, and related physical systems. You are expected to use algebraic and statistical methods to solve problems and conduct laboratory investigations. You will participate in thoughtful classroom discussions, critical problem solving, laboratory activities and their evaluation, and creative special projects.

Prerequisite: Successful completion of Geometry and concurrently enrolled in or have completed Algebra II. Teacher recommendation required.



ELECTIVES

GRADES 10

- Earth Science
- Environmental Interactions
- Marine Biology
- Forensics

GRADES 11-12

- Earth Science
- Environmental Interactions
- Marine Biology
- Forensics
- Honors Forensic Science
- Genethics
- Human Anatomy and Physiology 1
- Honors Human Anatomy and Physiology 1
- Honors Human Anatomy and Physiology 2
- Physics
- Honors Physics
- *Honors Organic Chemistry
- AP Biology
- *AP Chemistry
- AP Environmental Science
- AP Physics 1
- Intro to Epidemiology

*Honors Organic Chemistry and AP Chemistry are offered on alternating years

511 EARTH SCIENCE (LAB) LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 10-12

Earth Science is an introductory science course. You will not need any prerequisites, but having completed chemistry would be helpful. In this class, you will answer the following Essential Questions: 1. What is the relationship of the Earth to the remainder of the Universe? 2. By which natural forces was the Earth formed? 3. Since formation. what were the forces that have shaped the surface of the Earth? 4. What processes produce the variations of weather and climate over the surface of the Earth? You will shape a personal viewpoint by means of a series of individual and group projects -both laboratory, and synthetic/analytic studies of information collected from many sources. Assessments of your progress in the class will be made by self-centered evaluations of your own work, active participation in group discussions, formal presentations, laboratory reports and examinations. The textbook is EARTH SCIENCE. published by the Glencoe Company in cooperation with the National Geographic Society. However, first hand experiences are valued over readings whenever possible.

587 ENVIRONMENTAL INTERACTIONS (LAB) LEVEL 3 | 2.5 CREDITS | HALF YEAR

GRADES 10-12

Have you ever sat and watched honey bee harvest nectar for no other reason than to appreciate the beauty of the interrelatedness among living things? If so, this may be the elective for you. Course topics include: ecosystem basics, how humans ruin ecosystems, and how we then attempt to fix them. The majority of this class will be spent working hands-on as you explore these topics. You will analyze worm feces, grow mold, collect insect specimens, examine climate change, and study the impact of uncontrolled human population growth on Earth's limited environmental resources. In addition, you will work on articulating your thoughts regarding these matters of global importance in order to facilitate future agency.

Prerequisite: Successful completion of Biology



515 MARINE BIOLOGY (LAB) LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 10-12

This course is designed to give you an introduction to Marine Biology using local harbors and estuaries as your laboratory. Instruction will include projects, fieldwork, dissections, labs and supplemental readings. You will work in cooperation with community based organizations and individuals. For instance, you will have contact with and work with the Mattapoisett Land Trust, Mattapoisett Harbormaster and Shellfish Officers, and the Brant Point Shellfish Hatchery on Nantucket. You will be keeping a field notebook to document the work you do with Oyster Aquaculture. Focus of coursework is on the structure and function. special adaptations and ecology of life in Buzzards Bay, and the human impact of global marine ecosystems.

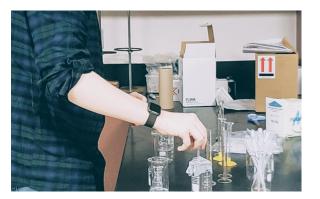
Prerequisite: successful completion of Biology



590 FORENSICS LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 10-12

Forensics is a hands-on approach to learning techniques as they apply to the science of crime investigation. Forensics labs will utilize biology, chemistry, physics, advanced math, and art as they apply to areas such as: processing a crime scene, collecting and preserving evidence, hair and fiber analysis, blood spatter analysis, DNA, ballistics, fingerprints, and crime scene analysis. Forensics is an opportunity to explore career paths such as Crime Scene Investigator, Forensics Science Technician, pathology, toxicology, and more. The main focus of this course will be to emphasize the value of the crime analysis laboratory techniques. This course combines basic theory and real laboratory experiments, creating an experiment based situation for the better understanding of the students. Students will be expected to participate in cooperative groups and will be assessed on lab techniques and knowledge application.

*Note - This class will include sensitive topics related to murder, death, and violence.



588 HONORS FORENSIC SCIENCE (LAB)

LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 11-12

Forensic Science is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. It has become a comprehensive subject incorporating Biology, Chemistry, Physics, Entomology, Earth Science, Anatomy and Physiology as well as other aspects of Science. Major topics include processing a crime scene, collecting and preserving evidence, identifying types of physical evidence, organic and inorganic analysis of evidence, hair, fibers, and paint, toxicology, arson and explosion investigations, DNA, fingerprints, firearms, and document analysis. This course combines basic theory and real laboratory experiments, creating an experiment based situation for the better understanding of the students. Honors students will also make connections between learning and relevant current events, and analyze how new technology is changing the field of crime scene investigation. The experiments used reinforce previously learned scientific principles rooted in Biology, Chemistry and Physics.

*Note - This class will include sensitive topics related to murder, death, and violence

Prerequisite: Successful completion of Honors Chemistry with B or better or Chemistry with an A- or better.

589 GENETHICS LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 11-12

The field of genetics is growing rapidly with the introduction of new techniques such as genetic modification of organisms, cloning, DNA testing, and CRISPR gene editing. In this course, students will study the scientific principles behind these techniques and discuss the social, ethical, and legal considerations that arise from each. The course will begin by reviewing the genetic and molecular basis of heredity and how the different molecular laboratory techniques are performed. Students will then research the ethical implications of the techniques through the use of news articles, case studies, and documentaries. Students will debate the pros and cons of each technique in both writing and class discussions. Assessment will be based on students' ability to understand the genetic principles and to support their ethical claims with evidence.

573 INTRODUCTION TO EPIDEMIOLOGY LEVEL 3 | 2.5 CREDITS | HALF YEAR

GRADES 11-12

Epidemiology is the branch of medicine that deals with the incidence, distribution, and possible control of diseases and other factors relating to health. Learn about infectious and non-infectious diseases, the role they take in societies, and health care systems around the world.

527 HUMAN ANATOMY AND PHYSIOLOGY A 1 (LAB) LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 11-12

Want to learn more about yourself as a living organism? In this course you will discover how the structure of the human body is related to its function. If you are interested in pursuing a health-related career you should enroll in this course. Activities will include laboratory experiments and dissections, cooperative learning projects, field trips to health-related facilities, and guest speakers from the medical profession and community service projects.

548

HONORS HUMAN ANATOMY AND PHYSIOLOGY 2 (LAB) LEVEL 4 | 5 CREDITS | FULL YEAR GRADE 12

This course is a continuation of Honors Human Anatomy and Physiology I. Students will continue their discovery of the human body through lab experiments, dissections, research projects, engagement in cooperative learning activities, and investigations of relevant diseases. Students will also learn valuable study skills and techniques. This is a valuable course if you are interested in pursuing a health-related career. This course will include topics such as the cardiovascular system, nervous system, respiratory system, endocrine system, lymphatic and immune system, and reproductive system.

Prerequisite: Successful Completion of Honors Human Anatomy and Physiology I

530 HONORS HUMAN ANATOMY AND PHYSIOLOGY 1 (LAB) LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 11-12

How does the structure of the human organism relate to its function? You will discover how your organs and organ systems are responsible for your health and well being in this quick-paced, in-depth study of Human Anatomy and Physiology. You will perform lab experiments and dissections, develop research projects, and engage in cooperative learning activities to attain your knowledge. Application of your knowledge will be realized during visits to Health-related facilities or as you listen to guest lectures given by medical professionals from our local area hospitals. This is a valuable course if you are interested in pursuing a health-related career.

Honors level will focus on a higher level of conceptual learning. Research projects will require the use of primary sources. The evaluation standard will be significantly higher than College Prep.

Prerequisite: Completion of Biology and Chemistry with a grade of B or better, or teacher recommendation



540 HONORS ORGANIC CHEMISTRY (LAB) LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 11-12

Organic chemistry is the study of carbon-based compounds. This lab course is an introduction to college organic chemistry, which is one of the more common requirements for most engineering, medical and science majors in college. Organic chemistry focuses on the physical and chemical properties of carbon compounds, as well as their reactivity with other compounds. This course will focus on the structure, name, and chemical reactions that various organic compounds will undergo. This course will also discuss various chemical tests to differentiate between varying types of organic compounds, and the spectroscopy involved in identifying them.

Prerequisite: Chemistry or Honors Chemistry with a grade of B or better. Teacher recommendation required.

580 ADVANCED PLACEMENT CHEMISTRY (LAB) LEVEL 5 | 5 CREDITS | FULL YEAR GRADES 11-12

This is a challenging program that is equivalent to a first year college chemistry course. The course is designed for you if you have done well in Honors Chemistry and seek the challenge of a demanding AP science course. The AP Chemistry curriculum will be followed and upon completion of this course you will have the necessary background to take the Advanced Placement Chemistry Examination. You will undertake a series of laboratory investigations similar to those done in an introductory college chemistry laboratory. Laboratory experiments will require additional class time.

Prerequisite: Grade of B or better in Honors Chemistry. Completion of Algebra II with grade of B or better. Teacher recommendation required.

586 ADVANCED PLACEMENT PHYSICS 1

LEVEL 5 | 5 CREDITS | FULL YEAR GRADES 11-12

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics; dynamics; circular motion and gravitation; energy; momentum; simple harmonic motion; torgue and rotational motion; electric charge and electric force; DC circuits; and mechanical waves and sound. Students will learn to analyze the world around them by conducting experiments and then modeling those experiments with mathematical models. The course is designed as an introductory physics course, no previous physics course is required, but is a very challenging introduction based on problem solving.

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



575

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE (LAB) LEVEL 5 | 5 CREDITS | FULL YEAR GRADES 11-12

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science. The following themes provide a foundation for the structure of the AP Environmental Science course.

- 1. Science is a process.
- 2. Energy conversions underlie all ecological processes.
- 3. The Earth itself is one interconnected system.
- 4. Humans alter natural systems.
- 5. Environmental problems have a cultural and social context.
- 6. Human survival depends on developing practices that will achieve sustainable systems.

In preparation for the AP Environmental Science Exam, you will be required to complete a substantial summer assignment as well as the College Board mandated experiments that will require additional class time.

Prerequisite: Grade of B or Better in Biology and Chemistry. Successful completion of Algebra II. Teacher recommendation required.

570 ADVANCED PLACEMENT BIOLOGY (LAB) LEVEL 5 | 5 CREDITS | FULL YEAR

GRADES 11-12

The course is designed to provide you with the conceptual framework, factual knowledge and analytical skills necessary to deal critically with the ever-changing science of biology. Not only will you gain the knowledge of molecules and cells, heredity and evolution, organisms and populations, you will come to realize that science is not a product, but an ongoing process. This intensive, quick-paced course is the equivalent of a first-year college biology course. You will be required to complete an independent study over the summer. Your assignment will be to create a botany portfolio of photographs that illustrate the structure and function of plant anatomy. In addition you must complete readings and assignments in Biology Concepts and Applications, fifth edition by Cecie Starr and Biology, seventh edition by Neil A. Campbell and lane B. Reece, the two textbooks used in the course.

You will perform various laboratory investigations to enhance your understanding of the concepts and biological principles taught in AP Biology. As part of your preparation for the AP Biology exam, twelve College Board mandated experiments would be performed. These experiments will require additional class time. Upon the completion of the course curriculum you will be expected to take the AP Biology Exam in May.

> Prerequisite: Grade of B or better in both Biology and Chemistry. Teacher recommendation required





TECHNOLOGY AP & ELECTIVES

ELECTIVES:

GRADES 9-12

- AP Computer Science Principles
- Engineering Design 1
- Multimedia Design
- Robotics Engineering 1
- Robotics Engineering 2
- Architectural Design 1
- Architectural Design 2
- Computer Science for All
- Introduction to CAD
- Introduction to 3D Design

GRADES 10-12

- AP Computer Science A
- Architectural Design 3
- Cybersecurity 1
- Cybersecurity 2
- Engineering Design 2
- Engineering Design 3
- Game Design and Development I
- Game Design and Development II
- Web Design and Development I

750 COMPUTER SCIENCE FOR ALL LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

An introductory course in computer science and the study of computer processing, algorithms, and programming appropriate for students who want to pursue technology interests. Prior programming experience is not required, although some students have had some previous exposure to programming. It emphasizes object oriented programming style and methodology using the Python language. Concepts are presented in the context of working examples and exercises. Programming projects are used to understand how computers work, how to design simple algorithms and judge their efficiency, art and graphics, and reinforce key programming notions, including iteration, data types, functions, loops, and objects.



755 ADVANCED PLACEMENT COMPUTER SCIENCE A

LEVEL 5 | 5 CREDITS | FULL YEAR GRADES 10-12

Students will learn to design and implement computer programs that solve problems relevant to today's society, including art, media, and engineering. AP Computer Science A teaches object-oriented programming using the Java language and is meant to be the equivalent of a first semester, college-level course in computer science. It will emphasize problem solving and algorithm development, and use hands-on experiences and examples so that students can apply programming tools and solve complex problems.

Prerequisite: Completion of AP Computer Science Principles

751

ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES LEVEL 5 | 5 CREDITS | FULL YEAR GRADES 9-12

Computer science embraces problem solving, hardware, algorithms, and perspectives that help people utilize computers to address real-world problems in contemporary life. As the study of computer science is evolving, the careful design of the AP Computer Science Principles. A course and exam continues to strive to engage a diverse student population, including female and underrepresented students, with the rigorous and rewarding concepts of computer science. Students who take the AP Computer Science Principles. A course and exam are well prepared to continue their study of computer science and its integration into a wide array of computing and STEM-related fields.

749 INTRODUCTION TO CAD LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

Intro to CAD is a half-year hands-on course that meets the Arts graduation requirement. This course covers the advanced computer-aided drafting (CAD) principles and practices that are used in industry today. The goal is to develop critical thinking skills via technical prints and drawings. This course will concentrate on single, orthographic, and isometric views. The main software used will be AutoCAD. Students will also be shown how to convert 2D single view drawings into 3D objects with the software Fusion 360.

756

53

INTRODUCTION TO 3D DESIGN LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

3D printing is a half-year hands-on course that meets the Arts graduation requirement. This course is also a prerequisite for Engineering Design 1. In Intro to 3D Modeling, students will be shown how to create parametric models using the software Fusion 360. This course will concentrate on designing mechanical parts, and logos, engineering drawing sheets, assemblies, and sculpting. Students will also be shown how to operate the 3 classroom printers where they will be allowed to print and take home some of their designs.



752 GAME DESIGN & DEVELOPMENT 1 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course is a general introduction to the various methods used to create original, fun, and engaging games. Designing complex games is a skill and one that this course aims to help you develop. You will code numerous video games using the C# language and Unity editor. In addition to creating games from scratch, you will tackle a series of coding challenges aimed at further developing your skill sets. This course emphasizes object oriented programming style and methodology. This course reinforces core programming programming notions, including iteration, data types, functions, loops, and objects.

Prerequisite: Completion of Computer Science for All or AP Computer Science Principles

704 MULTIMEDIA DESIGN LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course is a general introduction to the most usable digital media tools and strategies for high school students. Topics and tools will help you create awesome digital products that can be used as a part of a digital portfolio, to complete a project in another course, or simply out of personal enjoyment.

Topics in this class include website design, graphic design, photo editing, digital illustration, and digital animations. This class does meet the ORR art requirement.

786

GAME DESIGN & DEVELOPMENT 2 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 10-12

Game design and development II is a continuation of the game design experience and programming skills gained in Introduction to Game Design. In this section, students will continue to brainstorm, prototype, test, and build original games using Unreal Engine 4. While this course requires programming skills, those who successfully completed Introduction to Game Design have all of the skills required for this class. Games in this section will include more advanced features such as role-playing game elements and abstract games.

Prerequisite: Successful completion of Game Design and Development 1

751

WEB DESIGN AND DEVELOPMENT 1 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course is designed to start you on a path toward future studies in web development and design. By the end of this course you'll be able to describe the structure and functionality of the world wide web, create dynamic web pages using a combination of HTML, CSS, and JavaScript, apply essential programming language concepts when creating web page interactivity, and learn how to publish your web pages. By the end of the course, you will have developed working models for personal interests, business, and personal portfolio websites.

Prerequisite: Completion of Computer Science for All or AP Computer Science Principles

756

ARCHITECTURAL DESIGN 1 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

Architecture is a half-year hands-on course that meets the Arts graduation requirement. Students will research the theory, history, principles and practice of architectural styles, and eras. The role of design professionals such as interior designers, landscape architects, and engineers. Students will learn the fundamentals of SketchUp, (a three-dimensional design software program) to plan and design a framing model for a garage/workshop. Students will also use AutoCAD to create period-specific architectural pieces, floor plans, and elevation models of various structures.

> In order to maximize your potential in this course, it is recommended that you take the Introduction to CAD course prior to taking Architectural Design 1.

784

ARCHITECTURAL DESIGN 2 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

Architecture 2 is a half-year hands-on course that meets the Arts graduation requirement. In the first half of the class, students will use the software Chief Architect to design multiple three-dimensional models of a kitchen renovation, a bathroom renovation, and a layout for a large master bedroom design. In the second half of the class, students will design a multiple story home complete with floor plans, trim, roof, framing model, material list, kitchen plans, electrical plans, and final rendering.

790

ARCHITECTURAL DESIGN 3 LEVEL 5 | 2.5 CREDITS | HALF YEAR GRADES 10-12

Architecture 3 is a half-year hands-on course intended for students who are looking to pursue architecture at the post-secondary level. In the first half of the class, students will continue to advance their design skills by using AutoCAD and Chief Architect to complete a variety of design challenges. In the second half of the class, students will design a 3D model of a ranch style home using Chief Architect. Once the 3D model is completed, students will construct a scaled model with balsa wood. Skills for 21st- century learning standards will be emphasized and reinforced.

> Prerequisite: Successfully completed Architectural Design 2

749

ROBOTICS ENGINEERING 1 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course is meant to introduce students to the basics of programming and constructing robots. The course will offer a series of mechanical and coding design challenges for students to build and showcase their robots. Students will be using a C-based language to program their robots to autonomously execute a series of program instructions. Sample projects will include an autonomous dump truck, a robot with a gripper and a class design competition.

735 ROBOTICS ENGINEERING 2 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course is a continuation of Robotics Engineering 1 and is meant to expand on the mechanical engineering and programming skills of the first course. The course will continue to use the C-based programming format to challenge students at a higher level. Sample projects include a remote control rover bot, a pick and place robot, and a humanoid style robot.

Prerequisite: Successful completion of Robotics Engineering 1.

743

ENGINEERING DESIGN 1 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-10

Through project-based design and hands-on learning, you will apply 21st-century learning standards. Emphasis will be placed on the investigation, collaboration, creativity, and application of engineering principles and problem-solving skills necessary to create solutions to an engineering design problem. The engineering design process will be applied to various construction and transportation system modules. You will also learn how to incorporate 3D engineering modeling software into each of your project designs. Learn how to build a Co2 Dragster, make a vehicle from a mousetrap, design and launch rockets with a recovery system, and design a model hovercraft.

Prerequisite: Successful completion of Introduction to 3D Design.

744 ENGINEERING DESIGN 2 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This is an upper-level hands-on course intended for students planning to pursue engineering at the post-secondary level. Students will continue to advance their skills by using the engineering design process as a guide to solving a variety of technical challenges. Students will be exposed to post-secondary engineering course concepts including mechanical systems, power and energy systems, electrical systems, and aeronautical principles. Sample projects will include paper planes, gliders, powered planes, and cranes. Skills for 21st-century learning standards such as critical thinking, creativity, collaboration, and communication will be emphasized and reinforced.

> Prerequisite: Successful completion of Engineering Design 1.

789 ENGINEERING DESIGN 3

LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 10-12

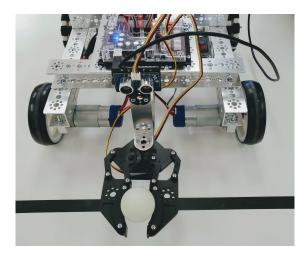
This is an upper-level hands-on course intended for students planning to pursue engineering at the post-secondary level. Students will continue to advance their skills by using the engineering design process as a guide to solving a variety of technical challenges. Students will be exposed to post-secondary engineering course concepts including mechanical systems, power and energy systems, electrical systems, and hydraulic systems along with materials testing. Sample projects will include a hydraulic 3-axis robot, (UROV) Underwater Remotely Operated Vehicle Skills for 21st-century learning standards will be emphasized and reinforced.

55 Prerequisite: Successfully completed Engineering Design 2.

792 CYBERSECURITY 1 LEVEL 3 | 2.5 credits | HALF YEAR GRADES 10-12

Cybersecurity 1 is a course designed to introduce high school students to the foundations of cybersecurity. The course covers topics such as networking basics, networking devices and initial configuration, and an introduction to endpoint security. In the networking module, students will learn about the different types of networks and how data is transmitted across them. In the networking devices module, students will learn about the different types of networking devices and their functions, including routers, switches, and firewalls. In the endpoint security module, students will learn about the various types of threats that exist to user's devices and how to protect against them. Throughout the course, students will have the opportunity to apply their knowledge through hands-on, authentic activities and lab exercises focusing on threats to networks and devices. Upon completion of the course, students will have a strong foundation in cybersecurity principles.

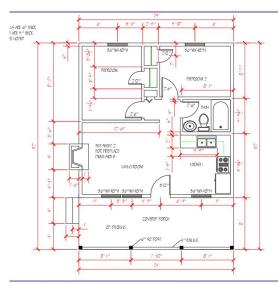
Prerequisite: Completion of Computer Science for All or AP Computer Science Principles

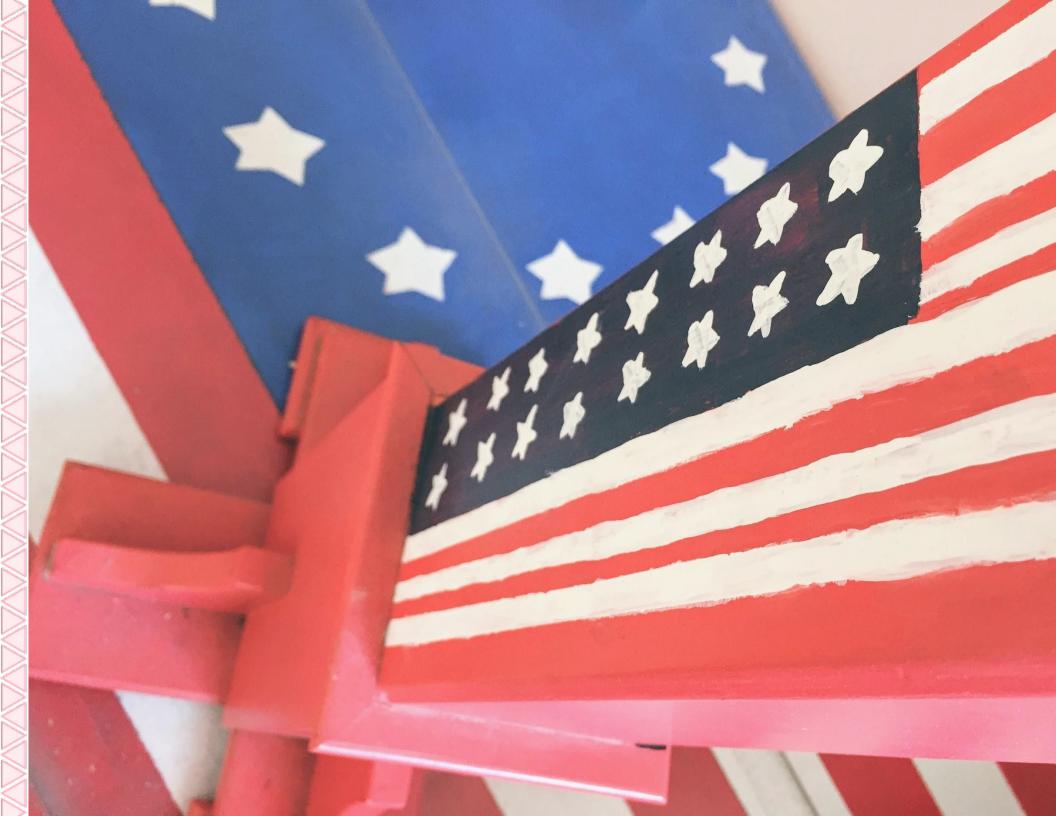


793 CYBERSECURITY 2 LEVEL 3 | 2.5 credits | HALF YEAR GRADES 10-12

Cybersecurity 2 is a course designed to build upon the foundational knowledge of cybersecurity learned in Cybersecurity 1. The course covers advanced endpoint security, network attacks and defense, and cyber threat management. In the advanced endpoint security module, students will learn how to assess and secure networks, operating systems, and endpoints. In the network threats and defense module, students will learn about the tools and techniques used to protect a network, including access control, firewalls, and cryptography. In the cyber threat management module, students will learn about governance in cybersecurity and threat management, including how to develop policies and manage risks. Upon completion of the course, students will have a strong understanding of advanced cybersecurity principles.

Prerequisite: Completion of Cybersecurity 1





SOCIAL STUDIES DEPARTMENT

ocial Studies is the integrated study of the social sciences and humanities. The goal of Social Studies educators is to respect and support the dignity of the individual, the health of the community, and the common good of all. The Old Rochester Regional School District Social Studies curriculum prepares students to be successful participants in their social, political, intellectual, cultural, and economic environments.

> "History is philosophy teaching by examples." Thucydides, The History of the Peloponnesian War

OR GRADUATION REQUIREMENTS

3 YEARS (World History and U.S. History I & II)

Through the study of History, Geography, Economics, Government and Civics student should:

- Develop lifelong learning skills
- Be aware of their place in the global community
- Develop the skills and attitudes necessary to be responsible, informed and active citizens
- Understand the increasing number of ways they are linked to other peoples, countries, and economies
- Understand connections among important historic events, themes, and issues and the role the past has played in shaping the present
- Recognize important information regarding the physical environment, location and place, regional features, demographic trends, and the relationship between people and environment
- Learn to resolve disagreements, reduce conflict, and prevent violence

The required courses are World History and Geography, United States History I, and United States History II. Courses in the Social Studies Department reflect the Standards of the Massachusetts History and Social Science Curriculum Frameworks as well as the Old Rochester Regional High School Mission Statement and Expectations for Student Learning.

In order to continue in Honors, or AP social studies courses, you should have an average of C or higher in the previous year's course at the same level, and a teacher recommendation. In order to advance to a higher academic level you should show mastery of the curriculum in your current class and have a teacher recommendation.

COURSE PROGRESSION

SOCIAL STUDIES GRADUATION REQUIREMENTS				
GRADE 7	GRADE 8	GRADE 9	GRADE 10	GRADES 11
7th grade Social Studies	8th grade Social Studies	World History and Geography	United States History I	United States II
		Honors World History and Geography	Honors United States History I	Honors United States History II
				AP United States History

ELECTIVES - SOCIAL STUDIES DEPARTMENT	
GRADES 11 - 12	
Economics (half year)	
Honors Economics	
AP European History (grades 10-12)	
AP Human Geography (grades 10-12)	
AP Psychology	
1960s and Beyond (half year)	
Global Issues (half year)	
History through Film (half year)	
Introduction to Psychology (half year)	
Introduction to Sociology (half year)	
Law and the Legal System (half year)	
Local History/Honor Local History (half year)	
Modern American Politics and Government (half year)	
Philosophy (half year)	

GRADUATION REQUIREMENTS

GRADE 9

- World History and Geography
- Honors World History and Geography

GRADE 10

- United States History I
- Honors United States History I

211 WORLD HISTORY AND GEOGRAPHY LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 9

This course is designed for the college-bound student. In this course, you will engage in a comprehensive study of world development from the 19th century to the present. Your focus will be on European expansion and development as it impacts both Western and Eastern cultures. In this course, you will cover concepts such as revolution, nationalism and imperialism and their effect on the world during this period. The focus during the 20th Century will be on the World Wars, the United States' involvement, development and responsibilities as a global power.

210 HONORS WORLD HISTORY AND GEOGRAPHY

LEVEL 4 | 5 CREDITS | FULL YEAR GRADE 9

This course is designed for the most able college bound student. In this course, you will engage in an intensive and comprehensive study of world development from the 19th century to the present. Focus will be on European expansion and development as it impacts both Western and Eastern cultures. In this course, you will stress concepts such as revolution, nationalism and imperialism and their effect on the world during this period. The focus during the 20th Century will be on the World Wars, the United States' involvement, development and responsibilities as a global power. Extensive independent readings and research are required.

Prerequisite: Teacher recommendation required.

221 UNITED STATES HISTORY I LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 10

This course is designed for the college bound student. In this course, you will cover the same content as the Honors level course, but differ in the depth of study and the interdisciplinary approach used in the Honors course. This course will cover the period of United States History from the Colonial Era through the Second Industrial Revolution. In addition to the content associated with this era of history, you will utilize and apply historical thinking skills including perspective, causation, comparison, and analysis of primary and secondary source material. Our republican government, national heritage, and critical thinking skills will be stressed.

220

HONORS UNITED STATES HISTORY I

LEVEL 4 | 5 CREDITS | FULL YEAR GRADE 10

This required course is designed for the most able college bound student with a strong interest in history. In this course, you will go into depth concerning the domestic issues and development of our country from Age of Exploration through the Second Industrial Revolution. In addition to the content associated with this era of history, students will utilize and apply historical thinking skills including perspective, causation, comparison, and analysis of primary and secondary source materials. Substantial outside reading assignments, research papers, and oral presentations will be required of all students.

GRADUATION REQUIREMENTS

GRADE 10

- United States History II
- Honors United States History II

231 UNITED STATES HISTORY II LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 11

This course is designed for the college bound student. In this course, you will cover the same content as the Honors level course, but differ in the depth of study and the interdisciplinary approach used in the Honors course. In this course, you will cover the period of United States History from the Era of Imperialism to the present. Students will be required to complete a formal research paper and read primary sources. Basic Social Studies skills as well as critical thinking will be reinforced. In addition to the content associated with this era of history, students will build upon the historical thinking skills found in U.S. History I as well as the concept of continuity and change.

> Prerequisite: Successful completion of United States History I.

230 HONORS UNITED STATES HISTORY II

LEVEL 4 | 5 CREDITS | FULL YEAR GRADE 11

This required course is designed for the most able college-bound students with a strong interest in history. In this course, you will go into depth concerning the domestic issues and development of our country from the Era of Imperialism to the present. In addition to the content associated with this era of history, students will build upon the historical thinking skills found in U.S. History I as well as the concept of continuity and change.

> Prerequisite: Successful completion of Honors United States History I and teacher recommendation

236 ADVANCED PLACEMENT UNITED STATES HISTORY LEVEL 5 | 5 CREDITS | FULL YEAR GRADE 11

This course will provide you with an intensive study of United States History from the Era of Imperialism to the present. This program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Emphasis will be placed on primary sources, research and essay writing.

Prerequisite: Successful completion of the United States History I and teacher recommendation.



ELECTIVES

GRADES 10-12

- *AP European History
- *AP Human Geography *Offered in alternating years

GRADES 11-12

- Honors Economics
- AP Psychology

GRADES 11-12 HALF YEAR

- 1960s and Beyond
- Global Issues
- Economics
- History through Film
- Introduction to Psychology
- Introduction to Sociology
- Law and the Legal System
- Local History/Honor Local History
- Modern American Politics and Government
- Philosophy

239 ADVANCED PLACEMENT EUROPEAN HISTORY

LEVEL 5 | 5 CREDITS | FULL YEAR GRADES 10-12

In AP European History, you will explore the modern history of Europe. The goals of the AP European History course is for you to gain knowledge of basic chronology and of major events and trends from approximately 1450 to the present, and to develop an understanding of some of the principal themes in modern European history, an ability to analyze historical evidence, and an ability to analyze and express historical understanding in writing.

Prerequisite: Teacher recommendation

257 ADVANCED PLACEMENT HUMAN GEOGRAPHY LEVEL 5 | 5 CREDITS | FULL YEAR GRADES 10-12

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). AP Human Geography prepares students for 20 different academic majors and 71 different career options.

Prerequisite: Teacher recommendation

268 ECONOMICS LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 11-12

Economics is a half-year elective for grade twelve, college preparatory students. The course is designed to familiarize you with the vocabulary, concepts, and skills within the social science of economics. The course will engage students to begin to think like economists. It will present economic tools and skills to promote success beyond the classroom. The course is divided into three units: economic thinking, microeconomics, and personal finance. Within each unit some material will be covered in depth, while other material will be presented as an overview. Throughout the semester a variety of instructional strategies will be used including, but not limited to, simulations and collaborative learning opportunities.

249 HONORS ECONOMICS LEVEL 4| 5 CREDITS | FULL YEAR GRADES 11-12

This course is designed primarily for seniors who are college bound and are interested in careers such as business, finance or government. You will study content dealing with basic economic issues, systems and growth. Focus will be on the internal workings of our market system. Units of study include: competition in the market, income and spending, economic institutions, measuring economic change, national economic goals, the role of government, monetary policy and the federal budget. This course will equip you with the basic skills and vocabulary for courses of study at the introductory college level.

Prerequisite: Teacher recommendation

246 ADVANCED PLACEMENT PSYCHOLOGY

LEVEL 5| 5 CREDITS | FULL YEAR GRADES 11-12

In AP Psychology, you will be exposed to a yearlong survey of psychology equivalent to an introductory course at the college level. You will analyze theories and research studies in preparation for the AP Psychology exam in May. A wide variety of topics are covered in the following fields: the history and science of psychology, biological psychology, human development, personality, intelligence, abnormal disorders, learning, memory, consciousness, motivation and emotion, perception, and social psychology.

Prerequisite: Teacher recommendation

244

INTRODUCTORY PSYCHOLOGY LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 11-12

Introductory Psychology is a one-semester course designed to explore the field of psychology. You will investigate such areas as human development, theories of learning, interpersonal relations, normal and abnormal behavior, personality, intelligence, emotions, social behavior, and current studies in the field of psychology. Reading assignments in related areas of the student's choice, participation in classroom and field experiments, and a series of programmed tapes and films complete the course. The course is designed to help you better understand the factors that contribute to the formation of human behavior and to better understand themselves.

251 HISTORY THROUGH FILM LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 11-12

This course examines US History through the lens of dramatic cinema. It involves a study of both cinematic structure and historical accuracy in film. You will learn significant aspects of filmmaking as well as historiographical skills in assessing source material through examination of primary source materials, historical interpretations and cinematic interpretations. The course will allow you to develop skills in assessing and interpreting the source material as well as interpreting the cinema as it represents history. In this course you will first learn some of the different movie-making techniques, including direction, cinematography, production design, lighting, film acting and editing. You will learn historical viewpoints on a period or event and then analyze several historically based films utilizing these skills.

262 MODERN AMERICAN POLITICS AND GOVERNMENT LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 11-12

Presidential Elections are every 4 years, Congressional elections every 2, and local elections take place every year in the thousands of towns and cities throughout the United States. We live in a civil society that demands awareness of the means of governance to address the numerous national concerns. This course will educate you on the political challenges facing the modern United States and the political foundations for which the answers to those challenges will be found.

SOCIAL STUDIES

245 INTRODUCTORY SOCIOLOGY LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 11-12

Introductory Sociology is a one-semester course divided into two separate guarter courses: in the first quarter, you will learn about Sociology, Culture, and Society; in the second guarter, you will learn about the Individual in Society. Sociology is basically the study of human relationships. Students who have taken this course should be better able to deal with social relationships they experience daily. Also, you will develop a sociological perspective of yourself and your environment. You should be able to live a more effective life as a part of your social world. The course will include films on contemporary issues, research and experiments, outside readings, group projects and discussions. This course is appropriate for both the non-college and college bound student.

213

LAW AND THE LEGAL SYSTEM LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 11-12

This course is intended for the college bound senior who is interested in pursuing a career in law or criminal justice. You must have strong analytical skills, speaking skills, and knowledge of current events. This course will examine the disciplines of criminology, procedural criminal law, substantive criminal law, and mechanics of the courtroom. You will be introduced to case law in areas including, but not limited to, searches and seizures, arrests, interrogations, and confessions. You will also be required to conduct legal research through the use of appropriate internet sites. The class will culminate with a mock trial process in which you will engage in a simulated courtroom experience.

261

LOCAL HISTORY: OUR COMMUNITIES, OUR COUNTRY, AND OUR COMMONWEALTH LEVEL 3 or 4 | 2.5 CREDITS | HALF YEAR GRADES 11-12

In this class, you will focus on the history of Southeastern Massachusetts. This is a project-based class where you will utilize oral history and other primary documents to better understand the history of our community. You will be able to course for either "A" level or "Honors" level credit based upon you project parameters.

258

THE 1960'S AND BEYOND LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 11-12

In this class, you will learn about the major events and individuals who have shaped the recent history of the United States. Your exploration in the 1960s will focus on the key elements of the Cold War, the Civil Rights movement and the war in Vietnam. In the decades that follow the 1960s, the presidential administrations will be reviewed including Watergate, Reaganism, and the Bush/Clinton years. Social Studies skills will be reinforced and current issues will be discussed and analyzed. Students will be required to express historical comprehension through research, writing, and cooperative studies. Technology and the impact of the media from post WWII-present will also be incorporated. Guest speakers will be used periodically and students will be exposed to modern educational teaching strategies including the Internet, news documentaries, and past newspapers.

253 GLOBAL ISSUES LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 11-12

Global issues is a course designed to increase students' global awareness. Your focus will be on defining the qualities and responsibilities of a global citizen in the 21st century. Source materials are the various forms of weekly magazines, daily newspapers, web and television broadcasts. You will be encouraged to analyze the many problems confronting the people of the world and to suggest methods of solution. Additionally, students study units on climate change, ongoing conflicts, terrorism, human migration, and social and cultural issues.

214 PHILOSOPHY LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 11-12

In this semester long course you will focus on several philosophical questions: how do we know anything is real? How can we be certain that we know anything? Do we have free will? How do we decide what is beautiful? How do decide what is right and wrong? Instruction is a blend of systematic and historical approaches to philosophy. Students may also conduct independent research on philosophical topics of their choosing.







UNIFIED ARTS DEPARTMENT

ART, FAMILY & CONSUMER SCIENCE, AND MUSIC

he arts have existed since the beginning of time allowing us to express ourselves in ways other than the written and spoken word. The arts inspire self-confidence, discipline, creative thinking skills, self-esteem, and cooperative learning.

We believe that the arts are essential to the education of all students. Through this discipline students exercise and display multiple intelligences and talents. Comprehensive arts programs from preschool through high school provide a foundation for lifelong learning. We believe that assessment in the arts should be designed to demonstrate what students know and can do.

The arts relate naturally to content in the total educational curricula. All courses at ORRHS are encouraged to incorporate the arts with interdisciplinary and cross-curricular lessons. Learning about and through the arts develops each learner's capacity to respond to creativity and contribute to society

OR GRADUATION REQUIREMENTS

1 YEAR OF THE ARTS (1 YEAR or 2 HALF YEARS)

UNIFIED ARTS - ART

COURSE PROGRESSION

ART FOUR-YEAR SEQUENCE			
YEAR 1 YEAR 2 YEAR 3 YEAR 4			
Art I	Art II	Honors Art III	AP Art & Design

ART ELECTIVES
Grades 9-12
Ceramics (half year)
Ceramics II (half year)
Drawing and Painting (half year)
Photography (half year)
Public and Environmental Art (half year)
Visual Design (half year)
Art History (half year)
All of the above courses may be taken more than once for credit



UNIFIED ARTS

ART

YEAR 1: - ArtI

YEAR 2:

- Art II

YEAR 3:

- Honors Art III

YEAR 4: - AP Art & Design

853 ART I LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 9-12

Art I is your introductory course in the Art Department. You will explore the elements and principles of two-dimensional and three-dimensional art in a hands-on way. You will cover the basic methods, materials, vocabulary and techniques specific to drawing, painting, collage and sculpture. Projects will emphasize personal expression, creative as well as critical thinking, craftsmanship and exhibition of work.

821 ART II LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 10-12

This course is a continuation of Art I. It is designed for the dedicated art student who wishes to further their study of visual art. You will continue to develop skills in the use of various media to create a body of work that demonstrates an understanding of visual aesthetics through personal expression. Technique, craftsmanship, idea development, and critical thinking will be emphasized throughout the creative process. Major artists, artwork, and art movements will be referenced as well as personal sketches in creating finished art works. You should note that this course will require more time than is allotted during class.

> Prerequisite: successful completion of Art I OR teacher recommendation

830 HONORS ART III LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 11-12

This course is intended for students that demonstrate a serious commitment to their artwork. You will continue your work begun in Art II by completing a variety of two and three-dimensional works of art in the areas of painting, drawing, sculpture and mixed media. Classroom instruction will focus on the techniques of creating, critiquing, self-assessing, revising and exhibiting. You should note that this course will require more time than will be allotted during class.

> Prerequisite: successful completion of Art Major I OR Art II OR teacher recommendation



ART

876 ADVANCED PLACEMENT ART & DESIGN LEVEL 5 | 5 CREDITS | FULL YEAR GRADES 12

The AP Art & Design curriculum is designed to simulate a college art foundations class. Characteristics of a college level class include independent work outside of class meeting time, student led inquiry, exploration and discovery. Assignments and artmaking will be done both in class and outside of class. Therefore you should plan to work in both environments. You will not be taking an exam. You will be submitting a portfolio of artwork. There are two components of the portfolio; the Sustained Investigation and the Selected Works. The main criteria for evaluation are inquiry/investigation, practice, experimentation, revisionsion, synthesis and written reflection. Students may choose 2D, Drawing or 3D portfolio options. Students will submit the required portfolio to the College Board in May.

Students should expect to:

- Buy additional materials for class projects.
- Spend considerable time working outside of class.
- Plan on attending a required planning meeting in the spring.
- Be assigned work to complete over the summer.
- Plan on attending work sessions outside of class time, during the school year to work on their concentration.
- Exhibiting their artwork

Prerequisite: Department Coordinator approval. One full year of courses related to chosen portfolio designation and completion of other art courses are strongly recommended



ART

ELECTIVES

GRADES 9-12:

- Ceramics I
- Ceramics II
- Drawing and Painting
- Photography
- Public and Environmental Art
- Visual Design
- Art History

856 CERAMICS I LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course introduces you to the fundamental skills, techniques and production of ceramic art forms. You will learn and apply the basic techniques of hand building, decoration, and glaze application. Technical skills and artistic vocabulary will be developed and applied through the creation of a variety of functional and sculptural ceramic objects. References to contemporary and historic ceramic arts will serve as examples and contexts for your projects. All finished work will be exhibited and accompanied by written statements and sketches.

856

CERAMICS II LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course continues the study of techniques and aesthetics of clay as an art medium, emphasizing more complex handbuilding processes while introducing basic wheel thrown forms. You will be challenged with projects that explore the possibilities of combining handbuilding and wheel thrown forms, while continuing to develop and explore surface design techniques using slips, underglazes and glazes. We will study contemporary and historical ceramics, as well as the future possibilities of clay in the 21st century.

Prerequisite: successful completion of Ceramics I



860 PUBLIC AND ENVIRONMENTAL ART LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course takes you out of the classroom and into the world. Through exploration and analysis of aesthetic relationships present in your surroundings, you will develop, present and create project proposals for installations such as murals, sculpture and other site-specific artwork. Works of public art, environmental art, monuments, gardens and architecture will be viewed and visited.



858 PHOTOGRAPHY LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

Students will learn the fundamentals of black and white photography and enhanced digital photography. Through a variety of assignments, you will learn; how to use a 35mm SLR manual film camera, as well as black and white film developing and darkroom processes, printing and exhibiting a photograph. You will be creating a digital portfolio of works and processes, as well as an artist statement to accompany this portfolio. You will be responsible for understanding photography's contribution and influence on society through the exploration of professional photographers, their work and the context of their photographic prints. Elements of Art and Principles of Design will guide all assignments and assessments for this course. Students will be producing Black and White photographic prints created from a negative as well as collaged and drawn imagery.

881

73

ART HISTORY LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

Introducing art within social, economic, geographical, and political contexts for understanding art and architecture through the ages. This one semester course offers high school students an overview of art throughout history by engaging students in activities that emphasize visual literacy and critical thinking skills as a means to develop an appreciation and knowledge of artworks and art movements in the European tradition and cultures beyond. An emphasis will be placed upon the artist's role in society, technological development and influence, and how art mediates a vast range of human experiences.

861 DRAWING AND PAINTING LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course allows you to explore a variety of materials and methods of both drawing and painting. You will be provided with technical information, guidelines and discipline needed to begin to master these two art processes. Major artists, artwork and art movements will be referenced. You will be expected to keep a sketchbook.

877 VISUAL DESIGN LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

In this course students will explore how people communicate visually and how to utilize design thinking. Coursework is based on the elements of art according to the standard principles of design. Activities will include a variety of materials such as, colored pencils, markers, and technology. Activities will explore popular culture along with, leading artists in the design field to help students begin to develop their own personal style. Students will use a sketchbook, along with class assignments to solve problems creatively.





UNIFIED ARTS - EARLY CHILDHOOD EDUCATION COURSE PROGRESSION

EARLY CHILDHOOD EDUCATION ELECTIVES			
Grade 9	Grade 10	Grade 11	Grade 12
Introduction to Early Education	Child Growth and Development	Early Childhood Education l	Early Childhood Education II



719

INTRODUCTION TO EARLY EDUCATION LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 9

Instructional Hours On-Site Laboratory Hours

This course provides students with an introduction to the field of early education and care. Students will explore current career opportunities in the early childhood field, examine the responsibilities and characteristics of successful early childhood teachers, and describe the various types of early childhood programs available to families. Students will gain insight into the principles of child growth and development. They will learn methods for guiding children's health and safety as well as techniques in behavior management. Students will gain proficiency through individual self-studies and project presentations, group activities, readings from the textbook and internet research. Students will devote time to observation in the preschool lab to study the interaction between the teachers and children.

EARLY CHILDHOOD EDUCATION

718 CHILD GROWTH AND DEVELOPMENT LEVEL 3 | 5 CREDITS | FULL YEAR **GRADE 10**

Instructional Hours **On-Site Laboratory Hours**

This course covers the care and development of children from conception to age eight. In this course, students will study the physical, intellectual, emotional and social development of children at each developmental stage. This course will also cover the areas of readiness for parenting, pregnancy and prenatal care, childbirth, care and guidance of children, and children's health and safety. Students will do an extensive study on the developing brain and learning styles. Students will devote time to observation in the preschool lab to study the interaction between the teachers and children. This class is an important introduction to the growth and development of children for those students who may be interested in childcare, teaching, nursing, school counseling, social work, physical or occupational therapy, psychology, legal and law enforcement. Students will learn how to plan a curriculum that is based on the development of the whole child.



726 EARLY CHILDHOOD EDUCATION I EARLY CHILDHOOD EDUCATION LEVEL 3 | 5 CREDITS | FULL YEAR **GRADE 11**

Instructional Hours **On-Site Laboratory Hours** Community Based Internship

In this course, students will examine the characteristics of children at different ages and learn how to modify their teaching skills to fit the developmental needs and interests of children at the various ages and stages of development. Students will discover how to arrange space in a center to promote safety as well as learning and fun. Students will gain insight into methods for handling guidance problems and will also learn ways to guide children through daily routines. They will implement techniques for guiding experiences in art, storytelling, puppetry, manuscript writing, math, science, social studies, music and movement. Students will design and present lessons, create materials to enhance the lessons, and organize special projects and events for the children and their families. In the preschool lab and in the community based programs, students will assist the classroom teacher in supporting children by actively engaging in developmentally appropriate learning activities. This course provides opportunities for students to investigate early childhood careers as well as introduces students. to the basics of child care administration.



733 TT LEVEL 3 | 5 CREDITS | FULL YEAR **GRADE 12**

Instructional Hours **On-Site Laboratory Hours** Community Based Internship

This course centers on components of a high quality early childhood education program and combines classroom theory and best practice with practical experience in the on-site laboratory classroom as well as participation in community based early childhood programs such as child care centers, preschools, and/or elementary schools. This year's experience in the classroom setting offers students the opportunity to enhance their individual skills as teachers, build relationships with children and families, and acquire job skills. Students will have the opportunity to plan a curriculum that is based on the development of the whole child and that align with the Massachusetts Curriculum Frameworks. Students will assist the classroom teacher in supporting children by actively engaging in developmentally appropriate learning activities. Students will be asked to reflect on their learning over the past four years and submit a final portfolio.



UNIFIED ARTS - MUSIC

COURSE PROGRESSION

ART FOUR-YEAR SEQUENCE				
YEAR 1	YEAR 2	YEAR 3	YEAR 4	
*Concert/Pep /Stage Band	*Concert/Pep /Stage Band	*Concert/Pep /Stage Band	*Concert/Pep /Stage Band	
*Mixed Chorus	*Mixed Chorus	*Mixed Chorus	*Mixed Chorus	
*Jazz Band	*Jazz Band	*Jazz Band	*Jazz Band	
Contemporary A Cappella	Contemporary A Cappella	Contemporary A Cappella	Contemporary A Cappella	
Music Composition and Theory (half year)				
Beginning Guitar (half year)				
Popular American Music (half year)				
*Classes may be taken more than once for credit as well as Honors or A-level credit				

MUSIC

831 OR 873 CONCERT/PEP/STAGE BAND LEVEL 3 or 4 | 5 CREDITS | FULL YEAR GRADES 9-12

This ensemble covers a wide range of performance opportunities and extra-curricular activities. A detailed schedule of events will be made available to you at the start of the school year to allow for your personal planning. Band members must participate in all rehearsals and performances, and be willing to commit themselves to the success of the program. Repertoire will include selections from Concert Band, Wind Ensemble, and Symphonic Band Literature of the Grade Levels 3-5 as well as Pep Band Arrangements appropriate to the performance medium. Chamber ensemble participation is optional, however you are encouraged to involve yourself in those aspects of the program.

835 OR 875 MIXED CHORUS LEVEL 3 or 4 | 5 CREDITS | FULL YEAR GRADES 9-12

The purpose of this choral ensemble is to introduce you to varied choral literature and basic choral technique. A detailed schedule of events will be made available to you at the start of the school year to allow for your personal planning. Chorus members must participate in all rehearsals and performances, and be willing to commit themselves to the success of the program. A handbook will be made available to you detailing the specifics of your participation.

Repertoire will include selections from Choral, Vocal Jazz, Sacred, and Secular Vocal Literature of the Grade Levels 3-5.

Upon completion of a year in chorus, you will have improved your vocal skills, improved your ability to read and interpret music, and developed an awareness of the necessity of total cooperation in effectively performing a piece of music. You will demonstrate these skills through public performance.

832 OR 874 JAZZ BAND LEVEL 3 or 4 | 5 CREDITS | FULL YEAR GRADES 9-12 *By Audition Only

The prime purpose of the Jazz Band will be to play various types of Jazz, Rock, and other forms of improvisational music. The Jazz Band will participate in local Jazz Festivals and competitions. Members will also be responsible to learn the Concert Band music and will participate in all Concert Band activities. Auditions will be held to determine participants and will be limited to standard jazz/big band instrumentation.

A detailed schedule of events will be made available to you at the start of the school year to allow for your personal planning. Band members must participate in all rehearsals and performances, and be willing to commit themselves to the success of the program.



MUSIC

878 CONTEMPORARY A CAPPELLA LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 10-12 *By Audition Only

The Contemporary A Cappella group is a full year performing ensemble. The ensemble will perform music ranging from early Doo-wop to contemporary pop and rock styles. The class will study the development of this new popular American song form, appropriate vocal production and vocal health, as well as microphone technique and performance style. There will also be much opportunity for student leadership. Members will also be responsible to learn the Chorus music and will participate in all Chorus activities.

The ensemble will often perform outside of the school day. A schedule of events will be made available at the start of the school year to allow for your personal planning. A Cappella ensemble members must participate in all rehearsals and performances, and be willing to commit themselves to the success of the program.

869 POPULAR AMERICAN MUSIC LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

In this half year music history course, you will study the development of popular American music, from the Blues and Jazz to today's styles. You will also study the trends and changes in the music industry over the past 100 years.

834 MUSIC COMPOSITION AND THEORY LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

The ability to play a musical instrument or read music is not required or necessary. The goal of this course is to teach you basic music composition skills and the writing of melodies with and without text. Music Composition and Theory will provide music instruction in all fundamental aspects of music reading and notation - rhythm, clefs, scales, intervals, modes, elementary harmony, etc. It will also provide you the foundation for strong aural skills through sight singing using solfege syllables and through music dictation exercises. In addition, you will study the form and structure of poems in order to set text in several projects relating to song writing. Music Composition and Theory will also prepare you to analyze the basic melodic and harmonic structure of a piece and to apply this knowledge to phrase, articulate, and interpret your own musical ideas. The technology MIDI lab will be utilized for music notation as well as ear training.

Music Composition and Theory is strongly recommended for you if you are considering majoring in music or for anyone interested in music as a career.

841 BEGINNING GUITAR LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course will serve as a basic introduction to performing on the guitar. You will learn to play songs with chords from lead sheets and melodies from simple notation. At the completion of the course you will be able to play basic chord progressions, will understand how to read a variety of guitar notation styles, and be able to read a chord-fingering chart. This is an acoustic guitar class.







WELLNESS DEPARTMENT

he physical education curriculum is a co-educational program that offers you a variety of choices within each unit of instruction. You may choose from classes that are of traditional sport and activities or that are of lifetime activities. The department offers you a variety of individual sports, team sports, racquet sports, lifetime activities, and wellness programs.

The physical education department emphasizes fitness and wellness of your body. With two large fitness centers that are stocked with state of the art equipment, physical educators can teach you the importance of physical fitness and its role your lifelong health and wellness. The physical education department encourages you to improve their muscular strength and endurance, your cardiovascular endurance, and your flexibility with all activities. The physical education teachers want you to understand that physical education provides opportunities for enjoyment, challenges, self-expression and positive social interactions for all students.

OR GRADUATION REQUIREMENTS

4 YEARS

81

WELLNESS

It is a goal of the physical education department to help you develop a strong spirit, a sound mind and a healthy body.

The physical education department includes all other departments in some way throughout your learning experience. You will learn about the history of each sport and activity, and you will be given a written quiz on the rules and regulations of that particular sport to test your cognitive knowledge and grammar. Science and math are incorporated largely in the weight room when learning about how your human body works. Physical education is important in helping to increase your learning ability in the classroom by increasing blood flow to the brain and allowing you to be more alert in the classroom.

The following activities are offered in physical education:

Badminton	Hockey	R.A.D. Self Defense	Table Tennis
Basketball	Lacrosse	Soccer	Tennis
Football	Pickleball	Softball	Ultimate Frisbee
Golf	Project Adventure	Speedball	Volleyball

ORRHS recognizes that regular physical activity is important for all students. As such and consistent with Massachusetts General Laws, the school requires four years of physical education for all students in grades 9-12. Students in grades 9 and 10 can meet their physical education requirement through their required Introduction to Physical Education course. Students in grades 11 and 12 can meet the physical education requirement through one of the three pathways that ORRHS has developed:

- 1. Through participation in a school physical education elective for a minimum of one semester for each year.
- 2. Through participation on one of the school's athletic teams (SUBJECT TO ELIGIBILITY POLICIES).
- 3. Through participation in an outside of school organized physical activity or activities totaling more than 30 hours in a school year, including but limited to, weight training, general fitness, dance, yoga, skating, gymnastics, karate, judo, or other approved activities that receive prior administrative approval.

COURSE PROGRESSION

WELLNESS

Students will select a pathway as part of the course selection process. Students who select Pathway 2 or 3 must complete and return the Pathways selection form along with a detailed description of the activity on the first day of school in order to gain final approval. Any student who fails to return the completed form will be enrolled in Pathway 1. Please note that graduation credits are awarded only for those who elect to enroll in Pathway 1. No credits will be awarded for any options that take place outside the school day, nor can any out-of-school option count towards the structured learning time mandate.

WELLNESS			
GRADE 9 (REQUIRED)	GRADE 10 (REQUIRED)	Electives, Grades 9-12	
Introduction to Physical Education (half year) OR Unified Physical Education Health 9 (half year)	Introduction to Physical Education (half year) OR Unified Physical Education Health 10 (half year)	 *Fitness for life—Fitness Center (half year) *Movement Arts / R.A.D. Training (half year) *Racquet Sports (half year) *Recreational Activities (half year) *Team Sports and Officiating (half year) *Unified Physical Education (half year) *Weight Training – Plt4m Program (half year) 	

*Classes can be taken more than once for credit

WELLNESS

9991

INTRODUCTION TO PHYSICAL EDUCATION LEVEL 3 | 2.5 CREDITS | HALF YEAR

GRADES 9-10

You are required to take this introductory course in the first two years of high school. This class will cover all sports listed previously. You will learn the history, rules and regulations of all sports participated in. You will practice skills that are pertinent to the activity you are playing while building up to game play. This course is designed to introduce you to a variety of different sports and activities as well as increase the physical fitness through FitnessGram testing. R.A.D. training for both males and females will be introduced as part of the curriculum in this class.

9986 UNIFIED PHYSICAL EDUCATION LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This course will cover the sports of basketball, bocce and softball. Additional topics of student leadership, wellness and physical fitness will also be addressed throughout the term. This is an opportunity for students of various abilities to come together by participating in educational and physical activities. It will follow the format of our Unified Sports program fostering the empowerment of all students in an inclusive setting. "The Unified Physical Education course is structured around the national physical education standards and grade-level outcomes, which include gaining the knowledge and skills necessary to maintain a health-enhancing level of fitness."

996 MOVEMENT ARTS / R.A.D. TRAINING LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This beginner level course will cover the history and health benefits of various forms of movement. You will learn proper techniques by participating in activities such as yoga, tai-bo, tai chi, stability ball exercises, dance, aerobics, pilates, resistance band training and meditation. R.A.D. is a self defense class for woman which teaches them the basic skills needed to defend themselves against viable threats in the real world. It is an empowering program that will teach specific self-defense techniques that students will be able to use if needed while building self-confidence in all individuals.



9989 RACQUET SPORTS LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 10-12

This course is a co-educational experience that offers you instruction in racquet activities that can be played throughout your lifetime while helping you to increase your lifetime wellness. Activities will include but not limited to tennis, badminton, pickleball, table tennis, speedminton, tennis baseball and nitro ball.

9992

TEAM SPORTS & OFFICIATING LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This advanced level course is a co-educational experience that offers you instruction in a variety of different activities. You will also learn how to set up and run tournaments. You are expected to know the basic rules and regulations from previous courses. This course includes sports such as basketball, field hockey, street hockey, football, handball, lacrosse, softball, soccer, speedball, ultimate Frisbee and volleyball.

9994

WEIGHT TRAINING - PLT4M PROGRAM

LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 9-12

This class emphasizes the PLT4M conditioning program for athletes who are in-season and out of season. You will train your body on a program tailored to fit the sport you compete in. Conditioning includes weight lifting, stretching, plyometrics and agility drills.

WELLNESS

CORE CLASSES Half year classes

GRADE 9

- Introduction to Physical Education
- Unified Physical Education
- Health 9

GRADE 10

- Introduction to Physical Education
- Unified Physical Education
- Health 10

9987 FITNESS FOR LIFE-FITNESS CENTER LEVEL 3 | 2.5 CREDITS | HALF YEAR

GRADES 10-12

This is a beginner course for anyone interested in basic fitness that you can perform for life. This course will introduce you to a workout log created by you, which will be performed in the fitness center. Workouts will include various cybex machines and cardiovascular equipment as well as focus on stretching, yoga and pilates to incorporate a full body workout that will benefit you throughout life not matter what your fitness level may be.

9988 RECREATIONAL ACTIVITIES LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADES 10-12

This is a beginner course for anyone interested in participating in individual and partner activities. Games that will be introduced are ones that are participated in by individuals of all ages and can be commonly found at camps or backyard events. Activities will include but not limited to bocce, horseshoes, korn-hole (bean bag toss), kan-jam, ladder ball, Frisbee golf, badminton, kickball and more. This is a fun and exciting class that is open to every one of all abilities.



507 HEALTH 9 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADE 9

Health Science is designed to enable the student to develop an understanding regarding their overall health and wellness. In the Health-9 course students will develop a practical approach to understanding themselves and their health. Students will examine the relationship between risk and protective factors and the influences they have on their actual behavior. Topics covered include: Communication & Conflict Resolution, Mental & Emotional Health, Bullying, Tobacco & Alcohol, and Body Systems.

509 HEALTH 10 LEVEL 3 | 2.5 CREDITS | HALF YEAR GRADE 10

Health Science is designed to enable the student to develop an understanding regarding their overall Health and wellness. In the Health-10 course students will develop a practical approach to understanding themselves and their health. Students will examine the relationship between risk and protective factors and the influences they have on their actual behavior. Health-10 course topics include: Nutrition & Eating Disorders, Drug Use & Abuse, Teen Dating Violence, Communicable / Infectious Disease, Reproductive Anatomy, and Stages of the Life Cycle.



WORLD LANGUAGE DEPARTMENT

he World Language Department has developed a sequence of courses for Latin, Portuguese, and Spanish. The programs at ORRHS build on the Junior High coursework that laid the foundation for advanced study.

Portuguese and Spanish will prepare you for communicative competency to help you meet the demands of a global society. In Latin class, you will learn about the many contributions the Romans made in the development of our modern Western society and its influence on the English language and the modern Romance languages.

REQUIREMENTS FOR 4 YEAR COLLEGES

Including Mass. State Schools

2 YEARS

In your language study, you will develop communicative skills for reading effectively in Latin, Portuguese, and Spanish. You will also learn to analyze grammatical patterns and vocabulary that will enable you to use English more effectively as you develop skills in your world language. In Portuguese and Spanish you will expand your skills for understanding and responding to the spoken language, as well as communicating ideas effectively by writing. You will further enhance your listening and speaking abilities through activities in the Language Lab.

If you enjoy learning languages, we encourage you to begin the study of an additional language when starting a new grade at the High School. However, we strongly advise you to also continue the study of the language that you began at the Junior High to provide you with access to the highest level of courses in the department. The minimum requirement for admission to Massachusetts' universities and most state colleges is a continuous sequence of at least 2 years of high school study of the same language. You will greatly enhance your chances of admission to rigorous post-secondary institutions with a complete sequence of 4 years of the same language at the High School level.

The World Language Department offers courses in 3 levels: College Preparatory, Honors, and Advanced Placement.

- College Preparatory courses work at a pace that require some independent learning from you as a student in the development of your language skills.
- Honors courses will develop more thorough language skills and a greater emphasis is placed on your commitment to study and review outside of the classroom.
- Advanced Placement (AP) is offered in Latin and Spanish Language. The material covered is equivalent to a third year college course. These courses require a substantial amount of independent work. Both courses prepare you for the Advanced Placement Exams offered in May.

COURSE PROGRESSION

WORLD LANGUAGE

TWO-YEAR LATIN COURSE PROGRESSION				
YEAR 1	YEAR 2	YEAR 3	YEAR 4	
Latin Language and Culture 1	Latin Language and Culture 2	Latin 2	Latin 3	

LATIN				
YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Latin 1	Latin 2 Honors Latin 2	Latin 3 Honors Latin 3	Honors Latin 4	Honors Latin 5 AP Latin

	PORTUGUESE	
YEAR 1	YEAR 2	YEAR 3
Portuguese 1	Portuguese 2	Portuguese 3

		SPANISH		
YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Spanish 1	Spanish 2 Honors Spanish 2	Spanish 3 Honors Spanish 3	Spanish 4 Honors Spanish 4	Spanish 5 AP Spanish Language

If you successfully completed Latin 1 or Spanish 1 in Junior High, it is <u>strongly</u> recommended that you continue onto a level 2 course at the High School. At any grade level, if you begin a new language at the High School, you are required to start with level 1. These courses may be used as an elective in addition to the continued study of your first world language.

LATIN

YEAR 1:

- Latin 1

YEAR 2:

- Latin 2
- Honors Latin 2

YEAR 3:

- Latin 3
- Honors Latin 3

YEAR 4:

- Honors Latin 4

YEAR 5:

- Honors Latin 5 / AP Latin

If you successfully completed Latin 1 in Junior High, it is strongly recommended that you continue onto a level 2 course at the High School.

326 LATIN LANGUAGE AND CULTURE 1 LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 9-11

Students in this course are introduced to the world of the ancient Mediterranean through their study of the basics of Latin grammar and Roman culture. Through this introductory course, students develop a deeper understanding of their own language, working extensively with English grammar and derivatives. In addition, students will learn about the daily life of the Romans, Greek and Roman mythology, as well as the geography of Rome and Italy.

###

LATIN LANGUAGE AND CULTURE 2 LEVEL 5 | 5 CREDITS | FULL YEAR GRADES 11-12

Latin Language and Culture 2 is a continuation of Latin Language and Culture Part 1. Students in this course will expand their knowledge of the world of the ancient Mediterranean through their continued study of the basics of Latin grammar and Roman culture. Through this course, students will continue to develop a deeper understanding for their own language, working extensively with English grammar and derivatives. In addition, students will continue to learn about the daily life of the Romans, Greek and Roman mythology, as well as the geography of Rome and Italy. Upon completion of this course students are prepared to continue their studies in Latin 2.

> Prerequisite: Successful completion of Latin Language and Culture 1

313 LATIN 1 LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 9-12

In Latin 1, students are introduced to the world of the ancient Mediterranean. They learn to read simple Latin passages, to analyze Latin grammar concepts, and to work extensively with English derivatives. Through this introductory course, students develop a deeper understanding of their own language. Students also learn about the daily life of Romans, Greek and Roman mythology, the great buildings and structures of the Roman Empire, and the history of the Roman Kingdom.

314

LATIN 2

LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 9-12

In Latin 2, students will continue to develop and strengthen their Latin reading and comprehension skills by expanding upon their knowledge of Latin vocabulary and grammar. The A-level provides a more guided review process at the beginning of the year to reinforce prior knowledge. After this, students approach new grammar concepts such as pronouns and verb tenses, and they will continue to recognize language patterns in Latin and their relationship to English. Students' cultural journey continues as they learn about ancient Greek heroes, Roman imperialism, and Roman cultural practices such as entertainment, travel, and banqueting.

Prerequisite: Successful completion of Latin 1

316 HONORS LATIN 2 LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 9-12

In Honors Latin 2, students will continue to develop and strengthen their Latin reading and comprehension skills by expanding upon their knowledge of Latin vocabulary and grammar. They approach new grammar concepts such as pronouns and verb tenses, and they will continue to recognize language patterns in Latin and their relationship to English. Students' cultural journey continues as they learn about ancient Greek heroes, Roman imperialism, and Roman cultural practices such as entertainment, travel, and banqueting.

Prerequisite: Grade of 85 or better in Latin 1 and teacher recommendation

381 LATIN 3 LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 10-12

In Latin 3, students continue to develop Latin reading and comprehension skills. The A-level course provides a more guided review process at the beginning of the year to reinforce prior knowledge before students approach new concepts. They also gain an understanding of more complex grammatical constructions such as indirect statements, irregular verbs and adjectives, and various uses of the subjunctive. They read lengthier, more complicated passages which are adapted from authentic Latin in order to prepare them for the transition to unadapted Latin in Latin 4H. Students learn about the transition from late Roman republic to early empire, myths from Ovid's Metamorphoses, and additional aspects of Roman daily life.

380 HONORS LATIN 3 LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 10-12

In Honors Latin 3, students continue to develop Latin reading and comprehension skills. They also gain an understanding of more complex grammatical constructions such as indirect statements, irregular verbs and adjectives, and various uses of the subjunctive. They read lengthier, more complicated passages which are adapted from authentic Latin in order to prepare them for the transition to unadapted Latin in Latin 4H. Students learn about the transition from late Roman republic to early empire, myths from Ovid's Metamorphoses, and additional aspects of Roman daily life.

Prerequisite: Final grade of 85 or better in Latin 2 Honors and teacher recommendation

390

HONORS LATIN 4 LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 11-12

In Honors Latin 4, students continue to develop their Latin reading and comprehension skills as they begin to make the transition from adapted Latin texts to original Latin works. First semester, students complete their study of Latin grammar. Second semester, students read and interpret Roman inscriptions from Pompeii as well as the writings of Pliny, Livy, and Julius Caesar. Furthermore, students examine how genre, time period, and historical context affect a work and our understanding of the Romans. If students complete Latin 4 Honors in good academic standing, they are prepared to continue to AP Latin.

Prerequisite: Final grade of 85 or better in Latin 3 Honors and teacher recommendation

LATIN

TWO-YEAR COURSE PROGRESSION

YEAR 1:

- Latin Language and Culture 1

YEAR 2:

- Latin Language and Culture 2

YEAR 3:

Latin 2

YEAR 4: - Latin 3

393 HONORS LATIN 5 / ADVANCED PLACEMENT LATIN LEVEL 4 & 5 | 5 CREDITS | FULL YEAR

GRADE 12 In Latin 5 Honors and AP Latin, students complete an in depth study of two famous works of Latin literature: Caesar's Gallic Wars and Vergil's Aeneid. This course of study requires students to translate approximately 1000 lines of Latin from the two works while considering literary style and themes in the context of ancient literature; a few of the themes discussed include – Human Being and the Gods, War and Empire, Leadership, History and Memory. In addition, students complete English readings from both works to help place the Latin readings in a larger, more significant context. The AP Latin test requires students to demonstrate proficiency in translating and comprehending Latin poetry and prose as well as contextualizing and analyzing the two works studied throughout the year.







PORTUGUESE

YEAR 1: - Portuguese 1

YEAR 2:

- Portuguese 2

YEAR 3:

- Portuguese 3

318 PORTUGUESE 1 LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 9-10

In Portuguese 1 students will be introduced to the working vocabulary, rules of pronunciation, and basic grammar of the Portuguese Language. Students will begin to develop their listening, reading, writing, and speaking skills in the Portuguese language in this course. Students will also study a variety of social, cultural, and historical aspects of the Portuguese-speaking world. In addition to developing basic skills of the Portuguese language, students will also learn about the diversity of the Lusophone world and use authentic sources to make connections to their own cultures.

328

PORTUGUESE 2 LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 10-12

In this course, students will expand the knowledge that they gained in Portuguese 1. They will continue to develop and improve reading, listening, writing, and speaking skills of the Portuguese language. Students will also learn to create and use more complex sentences in order to share and obtain information at a greater depth. They will discover new ways to express themselves and share their beliefs, ideas, and communicate past experiences. Most importantly, they will continue to use authentic resources to study other Lusophone cultures, their impact on the global society, and make connections to their own culture.

> Prerequisite: Successful completion of Portuguese 1

346 PORTUGUESE 3 LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 11-12

In Portuguese 3 students will build on the knowledge that they gained in Portuguese 1 and 2. Students will continue to develop and expand their reading, listening, writing, and speaking skills. They will also learn additional vocabulary associated with topics such as food, daily routines, expressing emotions, holidays, and traveling. They will be able to create and comprehend more complex sentences in Portuguese. Additionally, they will learn new ways to communicate and share their ideas about past experiences. Students will also analyze and interpret some basic authentic texts in Portuguese. Lastly, students will continue to study and comprehend aspects of the Lusophone world and compare them to their own cultures.

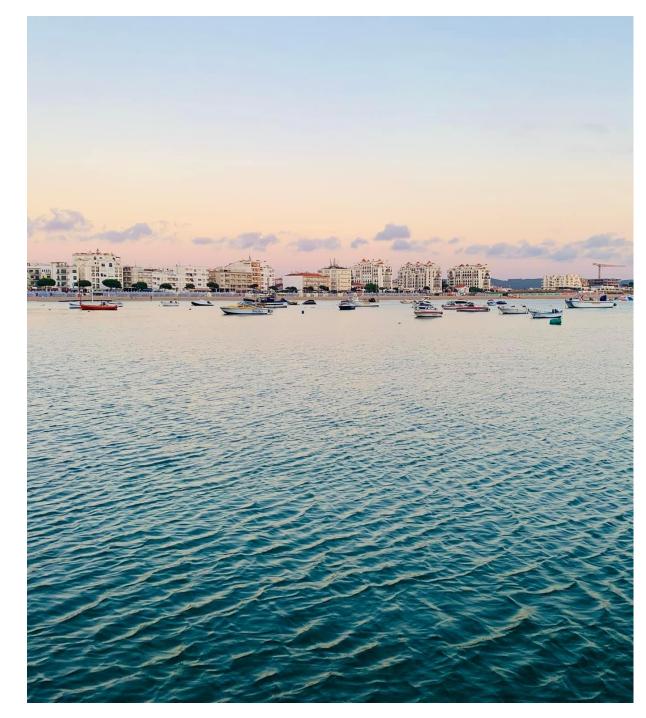
> Prerequisite: Successful completion of Portuguese 2



347 HONORS PORTUGUESE 3 LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 11-12

In Portuguese 3 Honors, students will continue to develop and improve their listening, speaking, reading, and writing skills. Students will focus on communicating about their immediate world and daily life activities. Students will recognize and acquire more complex features of the language and will interpret these concepts by incorporating them into their daily speech in the classroom. Students will be able to express their needs, create detailed oral descriptions within a context, and identify the main idea with supporting details in written material. Additionally, they will be able to analyze and interpret information from authentic materials to inform an audience. Students will also be able to identify differences in cultural practices among same-language cultures. Students will establish and extend connections with Hispanic culture through the use of technology, media, and authentic sources. Students should be prepared to place a greater emphasis on the use of the Portuguese in the classroom as well as on the use of authentic materials to learn about the Lusophone world on a regular basis.

> Prerequisite: Successful completion of Portuguese 2



SPANISH

YEAR 1:

- Spanish 1

YEAR 2:

- Spanish 2
- Honors Spanish 2

YEAR 3:

- Spanish 3
- Honors Spanish 3

YEAR 4:

- Spanish 4
- Honors Spanish 4

YEAR 5:

- Spanish 5
- AP Spanish Language

If you successfully completed Spanish 1 in Junior High, it is strongly recommended that you continue onto a level 2 course at the High School.

311 SPANISH 1 LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 9-12

In Spanish 1, students begin to develop their listening, reading, writing, and speaking abilities in the Spanish language. Students will learn simple grammar and basic vocabulary about a variety of topics in order to develop their communication skills. Additionally students study social, cultural, and historical aspects about a variety of countries in the Spanish-speaking world. As a result of this course, students will be able to make and respond to simple requests and read and respond to level appropriate material in Spanish. Students will also understand elements of the Hispanic culture and use authentic sources to identify the perspectives of that culture.

312 SPANISH 2 LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 9-12

In this course, students will review and build on the knowledge that they gained in Spanish 1. They will continue to develop and expand their reading, listening, writing, and speaking skills and learn additional vocabulary associated with food, daily routines, expressing emotions, describing clothing, holidays, and traveling. They will also be able to create more complex sentences by using reflexive verbs and commands. Additionally, they will learn new ways to communicate and begin to share their ideas about past experiences in Spanish. Lastly, they will continue to study and comprehend other cultures as they research Spanish-speaking countries.

Prerequisite: Successful completion of Spanish 1

310 HONORS SPANISH 2 LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 9-12

This course is designed for highly motivated and capable students who succeeded strongly in Spanish 1. It is expected that students will achieve significant development of their listening, reading, writing, and speaking skills. Students will learn and apply grammar principles and appropriate vocabulary to develop level proficient self expression. Students will be able to communicate simple events in the past, present, and near future. Additionally, the Hispanic world is studied in great detail. This course is conducted mostly in Spanish and a willingness to speak Spanish is important. Summer assignments may be elements of this course.

Prerequisite: Final grade of 85 or better in Spanish 1 and teacher recommendation.



331 SPANISH 3 LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 10-12

In Spanish 3, students build upon their communication skills developed in previous Spanish courses. Students will be able to recreate real life scenarios that focus on communicating about their immediate world and daily life activities in and out of school situations. Students will demonstrate a greater level of accuracy when using basic language structures and when exposed to more complex features of the language. Students will be able to make and respond to more complex requests. They will also frequently describe people, places, and situations orally and in writing using simple and more complex phrases, and will be able to present prepared material to an audience. Students will also engage in identifying expressive forms of the Hispanic culture as well as use authentic sources to identify various perspectives of the culture. Lastly, students will establish connections with the Hispanic culture through the use of media and authentic sources.

Prerequisite: Successful completion of

330 HONORS SPANISH 3 LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 10-12

In Spanish 3 Honors, students continue to improve and enhance language skills in all modes of communication. Students also continue to focus on communicating about their immediate world and daily life activities. They will recognize and acquire more complex features of the language and will interpret these concepts by combining them into their daily speech in the classroom. Students will elaborate on needs, create detailed oral descriptions within a context, and identify the main idea with supporting details in written material. Similarly, they will be able to interpret information from authentic material to inform an audience. Also, students will identify differences in cultural practices among same-language cultures. Students will establish and extend connections with the Hispanic culture through the use of technology and authentic sources. This course is conducted almost entirely in Spanish and a willingness to speak Spanish is required.

Prerequisite: Grade of 85 or better in Spanish 2 Honors and teacher recommendation



Spanish 2



351 SPANISH 4 LEVEL 3 | 5 CREDITS | FULL YEAR GRADES 11-12

In this course, students will continue to develop and improve their listening, speaking, reading, and writing skills in Spanish. They will accomplish this by applying the grammatical concepts and vocabulary they have studied to improve their self-expression. They will also be able to communicate present, past, and future events in Spanish. Lastly, students will be exposed to a variety of authentic Spanish language materials and be able to identify, analyze, and react to elements in Hispanic cultures. Additionally, students will frequently make comparisons between their own culture and Hispanic cultures. There will be an emphasis on speaking in class and students will do formal and informal presentations in order to strengthen and improve their communication skills.

Prerequisite: Successful completion of Spanish 3



350 HONORS SPANISH 4 LEVEL 4 | 5 CREDITS | FULL YEAR GRADES 11-12

In this course students will begin to achieve near native speaker proficiency in Spanish by refining their reading, writing, listening, and speaking skills. There is also a thorough review and refinement of previously studied grammatical concepts and vocabulary topics in order to improve communication. They will be exposed to authentic Hispanic literature in the form of articles, short stories, plays, and novels. They will read, analyze, and critically evaluate these assigned works. In order to fully understand the context of the literature students study, they will also learn about the history and geography connected to each work. Students will be required to prepare formal and informal oral presentations, write sophisticated essays on selected topics, and present cultural projects. Students will also have the option to prepare for the National Spanish Exam. This course is conducted in Spanish and a willingness to speak Spanish is required.

Prerequisite: Final grade of 85 or better in Spanish 3 Honors and teacher recommendation



371 SPANISH 5 LEVEL 3 | 5 CREDITS | FULL YEAR GRADE 12

In this course, students will strengthen their communicative skills and work towards achieving near native speaker proficiency in Spanish. They will be able to exchange and support opinions on a variety of topics related to contemporary and historical events and issues. Students will continue to practice how to initiate, sustain, and conclude conversations on a wide variety of topics, explain a complex process incorporating detailed instructions, and elaborate on present, past, and future events. Students will learn to interpret and analyze contributions of diverse groups within the Hispanic culture as well as use authentic sources to comprehend the perspectives of the culture. Students will maintain connections with the Hispanic culture through the use of technology and authentic sources.

Prerequisite: Successful completion of Spanish 4



373 ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE LEVEL 5 | 5 CREDITS | FULL YEAR GRADE 12

In the AP Spanish Language and Culture course students refine their language proficiency across the three modes of communication: Interpretive, Interpersonal, and presentational. This includes vocabulary usage, language control, communication strategies, and cultural awareness. This course focuses on the integration of authentic resources including online print, audio, and audiovisual resources, as well as traditional print resources that include literature, essays and magazine and newspaper articles with the goal of providing a rich, diverse learning experience. Students engage in an exploration of culture in both contemporary and historical contexts. This course develops students' appreciation of cultural products, practices, and perspectives. AP Spanish Language and Culture is a language acquisition course designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where Spanish is spoken. To best facilitate the study of the language and culture, the course is taught exclusively in Spanish.

Prerequisite: Final grade of 85 or better in Spanish 4 Honors and teacher recommendation





INDEX

ADVANCED PLACEMENT (AP)

AP Art & Design	71
AP Biology	50
AP Calculus AB	36
AP Chemistry	49
AP Computer Science	52
AP Computer Science A	52
AP Environmental Science	50
AP European History	62
AP Human Geography	62
AP Language & Composition	22
AP Latin	92
AP Literature & Composition	25
AP Physics	49
AP Psychology	63
AP Research	14
AP Seminar	14
AP Spanish Language & Culture.	99
AP Statistics	36
AP United States History	61
AP CAPSTONE	<u>13</u>
AP Research	14
AP Seminar	14
ENGLISH	<u>17</u>
AP English Language & Comp	22
AP English Literature & Comp	25

ENGLISH CONT

<u>17</u>

Creative English 12	26
Creative Writing (Half Yr)	29
English 9	20
English 10	21
English 11	22
English 12	25
English 12: Multi. Lit	27
English 12: Media Literacy	27
English 12: Monsters, Murder	26
Genealogy (Half Yr)	29
Honors English 9	20
Honors English 10	21
Honors English 11	22
Honors English 12	25
Journalism	28
Media & Popular Culture	28
Sports Media (Half Yr)	29
Theater (Half Yr)	29
MATHEMATICS	<u>31</u>
AP Calculus AB	36
AP Statistics	36
Adv. Algebra w/ Precalculus	35
Algebra I	34
Algebra II	35
Algebra Lab	34

MATHEMATICS CONT..... Calculus..... Finite Math and Stats..... Foundations of Algebra II..... Geometry..... Geometry Lab..... Honors Algebra II..... Honors Geometry..... Honors Precalculus..... Precalculus..... SCIENCE..... AP Biology..... AP Chemistry..... AP Environmental Science..... AP Physics 1..... Biology..... Chemistry..... Earth Science..... Environmental Interactions (Half Yr).. Forensics Half Yr)..... Genetics Half Yr)..... Honors Chemistry..... Honors Forensic Science..... Honors Human Anat. & Phys..... Honors Human Anat. & Phys 2... /

Honors Organic Chemistry......

<u>31</u>	<u>SCIENCE CONT</u>	<u>39</u>
36	Honors Physics	45
35	Human Anatomy & Physiology	48
35	Intro to Epidemiology (Half Yr)	48
34	Marine Biology	47
34	Physics	45
35	TECHNOLOGY	<u>52</u>
34	AP Computer Science	52
36	AP Computer Science A	52
36	Architectural Design 1 (Half Yr)	54
<u>39</u>	Architectural Design 2 (Half Yr)	54
50	Architectural Design 3 (Half Yr)	54
49	Computer Science for All (Half Yr).	52
50	Cybersecurity 1 (Half Yr)	55
49	Cybersecurity 2 (Half Yr)	55
44	Engineering Design 1 (Half Yr)	54
44	Engineering Design 2 (Half Yr)	55
46	Engineering Design 3 (Half Yr)	55
46	Intro to 3D Design (Half Yr)	53
47	Intro to CAD Design (Half Yr)	53
48	Game Design & Dev. 1 (Half Yr)	53
44	Game Design & Dev 2. (Half Yr)	53
47	Robotics Engineering 1 (Half Yr)	54
48	Robotics Engineering 2 (Half Yr)	54
48	Multimedia Design (Half Yr)	53
49	Web Design & Dev. 1 (Half Yr)	53

INDEX

SOCIAL STUDIES	
AP European History	
AP Human Geography	
AP Psychology	
AP United States History	
Economics (Half Yr)	
Global Issues (Half Yr)	
History Through Film (Half Yr)	
Honors Economics	
Honors Local History (Half Yr)	
Honors United States History I	
Honors United States History II	
Honors World History &	

<u>57</u>

Geography
Intro Psychology (Half Yr)
Intro Sociology (Half Yr)
Law & the Legal System (Half Yr)
Local History (Half Yr)
Modern American
B 11.1

POIITICS (Half Yr)
Philosophy (Half Yr)
The 1960s & Beyond (Half Yr)
United States History I
United States History II
World History & Geography

UNIFIED ARTS
<u>ART</u>
AP Art & Design
Art I
Art II
Art History
Ceramics (Half Yr)
Ceramics II (Half Yr)
Drawing & Painting (Half Yr)
Honors Art III
Photography (Half Yr)
Public & Environmental
Art (Half Yr)
Visual Design (Half Yr)
FAMILY & CONSUMER
<u>SCIENCE</u>
Child Growth & Development
Intro to Early Education
Early Childhood Education
Early Childhood Education II
<u>MUSIC</u>
Beginning Guitar (Half Yr)
Concert/Pep/Stage Band
Contemporary A Cappella
Concert/Pep/Stage Band

<u>67</u>	MUSIC CONT	<u>76</u>	W
<u>68</u>	Contemporary A Cappella	78	
71	Honors Mixed Chorus	77	
70	Honors Concert Stage Pep Band	77	
70	Honors Jazz Band	77	
73	Jazz Band	77	
72	Mixed Chorus	77	
72	Music Comp & Theory (Half Yr)	78	
73	Popular American Music (Half Yr).	78	
70	WELLNESS	<u>81</u>	
73	Fitness for Life (Half Yr)	85	
	Health 9 (Half Yr)	85	
72	Health 10 (Half Yr)	85	
73	Intro to Phys. Ed (Half Yr)	84	
	Movement Arts (Half Yr)	84	
<u>74</u>	Racquet Sports (Half Yr)	84	
75	Recreational Activities (Half Yr)	85	
74	Team Sports and		
75	Officiating (Half Yr)	84	
75	Unified Physical Edu (Half Yr)	84	
<u>76</u>	Weight Training (Half Yr)	84	
78	WORLD LANGUAGE	<u>87</u>	
77	AP Latin	92	
78	AP Spanish	99	
77	Honors Latin 2	91	

)	WORLD LANGUAGE CONT	<u>87</u>
	Honors Latin 3	91
	Honors Latin 4	91
	Honors Latin 5	92
	Honors Portuguese 3	95
	Honors Spanish 2	96
	Honors Spanish 3	97
	Honors Spanish 4	98
	Latin 1	90
	Latin 2	90
	Latin 3	91
	Latin Language & Culture 1	90
	Latin Language & Culture 2	90
	Portuguese 1	94
	Portuguese 2	94
	Portuguese 3	94
	Spanish 1	96
	Spanish 2	96
	Spanish 3	97
	Spanish 4	98
	Spanish 5	98



OLD ROCHESTER REGIONAL HIGH SCHOOL 135 Marion Road, Mattapoisett, MA 02739 Phone: 508-758-3745 | Fax: 508-758-3167

https://www.oldrochester.org/orrhs