

Our Lady of the Hamptons  
Regional Catholic School



A  
CURRICULUM  
GUIDE  
to  
OLH PREP  
2019-2020

*Conscious of the uniqueness and importance of each individual child to God, to self and to society;*

*Convinced of the need of our Church and our world to develop mature, educated Christians;*

*Cognizant of the awesome privilege and responsibility inherent in challenging and guiding the young people entrusted to our care;  
Committed to the belief that an individual's potential is his or her greatest asset;*

*We, the administration and faculty of Our Lady of the Hamptons Regional Catholic School, fully dedicate ourselves to utilize our personal and professional gifts and talents for the total education of our students so that they may become aware of their place in the future as Christians and citizens of this country and the Kingdom of God.*

With this statement of the mission of our school as the base, we are proud to present to you the academic curriculum for the Middle School program at Our Lady of the Hamptons Regional Catholic School. Ours is rigorous course of study based upon the Common Core Learning Standards and Diocesan guidelines. The opportunities for growth and development are tremendous—the challenges many!

While the opportunities stated herein provide a guide to content, we emphasize that the underlying foundation for the sixth, seventh and eighth grade students is the religious, spiritual, moral education of each individual student.

The partnership of school, parish, family and student is essential. An informed community is a productive unit!

**-Our Lady of the Hamptons Regional Catholic School**

## **SIXTH GRADE CURRICULUM**

### **RELIGION**

Sixth grade students will explore the Old Testament beginning with the story of Abraham and Sarah. The themes of revelation and covenant are introduced. Readings from Scripture offer insight into the Christian life in deliverance through the Paschal Mystery.

Students will describe the special mission entrusted to the Church as the beginning of God's kingdom. They will recall the importance of rules, especially the ones that guide our moral lives through the Ten Commandments. Students will further study in-depth the sacramental practices that can give us hope, keep us close to God, and help us avoid the exile of sin.

Religion activities encourage creative expression through poetry, drama, art, essays, and projects aimed at advancing a more profound understanding, identification, and integration of Catholic Christian values and traditions.

## **ENGLISH-LANGUAGE ARTS**

Within the sixth grade ELA (English Language Arts) program, students will strengthen their grammar, vocabulary, and spelling skills as outlined in the Common Core Standards. This program integrates the writing process with its structural underpinning at word level, the sentence level, and the idea level to empower students as writers and critical thinkers. This program provides all students with proficiency in writing skills and grammar, reinforcement of the correct use of writing conventions, and practice using precise language and subject-specific vocabulary. Students learn how to effectively communicate ideas using appropriate formats for the intended audience in each instance. Emphasis is placed on subject-specific terms and academic vocabulary with the goal of making students strong communicators and analytical readers.

Projects include the creation of personal narratives with particular focus on descriptive elements, persuasive writing and speeches, expository writing, objective summaries, and creative writing. In addition, students have the opportunity to write features for *Kidsday*, a section of the paper *Newsday*. Samples of each student's writing will be stored in writing portfolios until grade 8.

Through various well-designed activities assigned during the school year, students are well-prepared for the New York State ELA exam in April. Preparation for this state-mandated test includes nonfiction and fiction close reading activities, essay writing, looking for evidence and details to support ideas, and other specially planned assignments that familiarize students with the format and purpose of the test.

### **EXTENSION ACTIVITIES:**

- Participation in class and school-wide oratorical competitions
- Presentation of a class play
- Participation in annual Young Authors' project
- Participation in Long Island Spelling Bee
- Participation in *Kidsday* and local and national writing contests

### **LITERATURE**

In sixth grade, students apply thinking skills and use knowledge of structure, content, and vocabulary to understand informational texts. Students continue to draw conclusions about texts, compare and contrast literary elements in multiple genres, and adopt an organizational format appropriate for writing prompts. They learn to answer questions about informational material, and how to support ideas with evidence and textual details.

This course involves close study of novels and reading comprehension activities based on monthly themes, using essential questions and targeted tasks to guide analysis. Using the Common Core Standards as a guideline, students study state-designed and teacher-created modules as they work to understand essential questions as they read. Time is spent analyzing fiction and nonfiction texts during the year. Students work on comparing different viewpoints presented in texts, and they share their findings through writing and discussion.

Examples of some of the works studied in this course:

- *Maniac Magee* by Jerry Spinelli
- Greek and Roman myths

- Poetry
- Old and New Testament stories
- Monthly books assigned by theme

### **EXTENSION ACTIVITIES:**

- Mythology study
- Structured, formal, and creative writing
- In-class debates
- Technology-based learning projects

### **SOCIAL STUDIES**

In this course, students will study the geography, religion, politics, economy, and social structure of civilizations in the Eastern Hemisphere. The history of these civilizations will be explored through documents, artifacts, important ideas, beliefs, and traditions that have contributed to the development of future nations.

Students begin by studying life in Mesopotamia, then turn their attention to ancient Egypt. In this fascinating unit, students learn about mummification, Egyptian rulers, and architecture unique to the period. Further lessons include historical studies in the geography, religion, human achievement, economy, and political and social structuring of world civilizations.

From there, students look at ancient India. Its rich history introduces students to various religions, rulers, and inventions. Students then learn about the many achievements of the Chinese people, the dynasties, and philosophers such as Confucius. By now, students are able to draw connections between the civilizations studied and are able to predict the pattern of development of civilizations that follow. Students proceed to study the Middle Ages, the feudal system, the Renaissance, and the Reformation.

In addition, map skills become an integral part of the social studies curriculum. Students begin to discover, identify, and interpret

key geographical features, leading to a greater awareness of the impact geography has on human society.

In collaboration with the ELA and religion programs, students will make deep connections to the content by reading, writing, and project-based learning.

## **COMMON CORE MATHEMATICS**

In grade six, students will explore the following topics:

### **Number Systems**

- Extend on operations with fractions and decimals and apply such procedures to real-world situations
- Compare different forms of numbers, including fractions, decimals, percentages, and integers
- Work with absolute value
- Distinguish between factors and multiples in different contexts
- Work on more rigorous arithmetic expressions, especially those involving exponents

### **Algebra**

- Translate between verbal and algebraic expressions
- Evaluate and simplify various algebraic expressions and apply these in context
- Solve one-step and two-step equations and look at these in the form of tables
- Discuss solutions to simple inequalities
- Convey proportional relationships and use equations to solve problems
- Focus on basic applications of percentages, from both an arithmetic and algebraic perspective

### **Geometry**

- Derive the means to calculating area of triangles, quadrilaterals, and

irregular polygons

- Use nets to figure out the surface area of solids
- Work on calculating the volume of prisms
- Complete perimeter and area exercises in the coordinate plane

### **Statistics**

- Define measures of center and measures of variability
- Display data via tables and plots
- Answer questions by reading pre-constructed displays

All students in sixth grade will take the New York State Common Core Mathematics Grade 6 Assessment in April and May.

### **EXTENSION ACTIVITIES:**

- Participation in school Math Fair and Math Bee

## **SCIENCE**

### **Living Environment and Physical Science, Part 1, (Integrated Science)**

Students will work on an understanding of the fundamental science principles related to several topics. These include scientific investigation and measurement, cells and microscopy, properties of matter, human body systems, characteristics of living things, plant structure, reproduction and photosynthesis. They will become competent in the use of the scientific method. This will enable the students to complete Science Fair projects that reflect a high level of critical and creative thinking.

The sixth grade science class includes several animal dissections, emphasizing the structure and function of living creatures. The students will also become familiar with the theories of plate tectonics, and perform several hands-on activities. Internet-based assignments are an integral part of this course.

### **EXTENSION ACTIVITIES:**

- Presentation of a major Science research project at the school fair
- Participation in Chaminade and Brookhaven Science Fairs

## **SEVENTH GRADE CURRICULUM**

### **RELIGION**

This course is primarily set around the delineation of God's love as it is portrayed through His Son, Jesus. Through close readings of stories from the New Testament, students learn about Jesus' life, from birth to his ascension into Heaven. Students examine what it means to live morally and righteously by looking at the lives of the saints and other Catholic leaders. In the last trimester, students begin to discuss the Holy Spirit in preparation for a closer study of the sacrament of Confirmation in eighth grade.

#### **Topics include:**

- Mystery of the Incarnation (Jesus' Birth, Baptism, Jesus as a boy)
- Kingdom of God (Church, Earth, Heaven)
- Living as a Christian (Means of serving, conscience, virtues)
- Meaning of Prayer (Eucharist, Meditation, Contemplation)
- The Paschal Mystery (Jesus' Passion, Resurrection, Ascension)

#### **EXTENSION ACTIVITIES:**

- Three-day retreat to Camp Quinipet, Shelter Island
- May Crowning
- Class prayer services
- Class Mass
- Outreach activities at the Senior Center

### **ENGLISH/LANGUAGE ARTS**

The course covers all aspects of English: grammar, punctuation, spelling, vocabulary, structure, writing, and speaking as outlined in the Common Core Learning Standards. This program provides all students with proficiency in writing skills and grammar, reinforcement of the correct use of writing conventions, and practice using precise language and subject-specific vocabulary.

Students continue to learn how to effectively communicate ideas using appropriate formats for the intended audience in each instance. Time is spent each day writing for different purposes in all subject areas. Emphasis continues to be focused on subject-specific vocabulary and academic vocabulary with the goal of making students strong communicators and analytical readers.

Considerable emphasis is placed on proper grammatical structure in writing, emphasizing variety in sentence structure, and use of more descriptive terms.

Special writing projects include: arguments, objective summaries, short stories, and articles. Each student will add a final draft of their writing projects to their portfolios upon completion. These portfolios are stored until grade 8.

Through various, well-designed activities assigned during the school year, students keep skills sharp for the New York State ELA (English Language Arts) test that will be given the following year. Preparation for this state-mandated test include nonfiction and fiction close reading activities, essay writing, looking for evidence and details to support ideas, and other specially planned assignments that familiarize students with the format and purpose of the test.

#### **EXTENSION ACTIVITIES:**

- Participation in class and school-wide oratorical competitions
- Presentation of a class play
- Participation in annual Young Authors' project
- Participation in Long Island Spelling Bee

## LITERATURE

Students are required to read aloud to develop proper articulation and enunciation skills, to recognize the relationship between words, phrases, and clauses in sentences and to master the meter and rhythm of what they are reading. They read a variety of literary forms: novels, short stories, essays, poetry, nonfiction articles, and primary sources. They read superior works of literature by such authors as Charles Dickens, Avi, and William Shakespeare.

This course, like the sixth grade course, involves close study of novels and reading comprehension activities based on monthly themes and using essential questions to guide the analysis. Using the Common Core standards as a guideline, students study state-designed modules and teacher-created modules designed to give students exposure to challenging and interesting texts. Time is also spent analyzing fiction and nonfiction texts during the year. Students work on comparing different viewpoints presented in texts, and they share their findings through writing and discussion. They make inferences as they read, search for evidence to support observations, and analyze literary elements regularly.

Examples of some of the works studied in this course:

*Romeo and Juliet* by William Shakespeare

*A Long Walk to Water* by Linda Sue Park

*The True Confessions of Charlotte Doyle* by Avi

*A Christmas Carol* by Dickens

Poetry

Historical speeches

Nonfiction articles related to monthly themes

## **MONTHLY THEMES**

September- Honesty/Truth

October- Perseverance

November- Citizenship/Loyalty

December- Change, Personal Growth

January- Bravery/Heroism

February- Caring/Love

March- Fear/Disbelief

April- Faith

May- Family, Decision-making, Relationships

June- Free Choice

## **EXTENSION ACTIVITIES:**

- Creative writing
- In-class debates
- Technology-based projects (blogs, Power Points, videos, and more)

## **SOCIAL STUDIES CURRICULUM**

The course begins with pre-Columbian history of the North American continent. Students learn about the way of life for early Native Americans and how the geography and topography of the land influenced their cultures.

Next, we move to the Age of Discovery and the arrival of Columbus, Spanish colonizers, and the English and French settlers. Students study how these events led to the swift destruction of native empires in North, Central, and South America.

Time is spent studying the Colonial period in our nation, when exercises in self-government gradually took hold, and democratic and republican sentiments began to develop. Students study some of the key documents written by our founding fathers as they worked to build a new nation. This close-reading of primary sources gives students the practice looking at authentic texts as dictated by the Common Core standards.

With the Declaration of Independence in 1776, we traverse the defeat of the British, the writing of the Constitution, and early efforts to establish a lasting and successful government in which power is shared by the federal and state governments.

We continue with the War of 1812 and subsequent years of general peace and prosperity with little interference from European countries. Students study the early presidents of our nation and they read about how the United States grew in wealth, industry, and in appreciation of a broadening democracy during this time period.

The year concludes with the presidency of James Monroe and his Era of Good Feelings. The eighth grade curriculum picks up with the Age of Andrew Jackson.

#### **EXTENSION ACTIVITIES:**

- Explorer projects and Our Hall of Explorers
- Time line presentations
- Class debates- individual and team- on various topics
- Frequent group projects on key concepts

#### **COMMON CORE MATHEMATICS**

Students will explore the following:

##### **Number Systems**

- Work on multi-step problems involving operations among various rational numbers
- Solve word problems incorporating the manipulation of rational numbers
- Calculate unit rates in different situations

##### **Algebra**

- Solve multi-step equations
- Solve multi-step inequalities and graph solution sets on the number

line

- Depict algebraic and proportional relationships on graphs
- Extend to more rigorous applications of percentages, such as percent change

##### **Geometry**

- Construct basic geometric drawings and work with scale drawings
- Become familiar with cross sections of solids
- Explore different types of angles in more elaborate planar pictures
- Derive the means to find the circumference and area of a circle
- Extend to more challenging surface area and volume exercises

##### **Statistics & Probability**

- Discuss populations and samples, especially those that are representative
- Compare and contrast different populations and generate meaningful samples
- Distinguish experimental probability from theoretical probability
- Calculate probabilities for simple and compound events
- Conduct basic simulations

#### **EXTENSION ACTIVITIES:**

- Participation in school Math Fair and Math Bee

#### **SCIENCE**

##### **Living Environment and Physical Science, Part 2, (Integrated Science)**

The seventh grade Science class is divided into three distinct segments- Cells & Heredity, Human Body Systems & Functions, and Earth Science (mapping, rocks and minerals, and the rock cycle. Hands-on labs are an integral part of this course. The students will take part in

a DNA lab at the Molecular Biology Department of the State University of New York at Stony Brook.

Through continued emphasis on the scientific method, students will further enhance their skills at problem-solving and the research method. This is evident in the quality of projects that are displayed at the annual Science Fair in the spring.

#### **EXTENSION ACTIVITIES:**

- Presentation of a major Science research project at the school fair
- Participation in Chaminade Science Fair
- Participation in Brookhaven Laboratory Science Bowl
- Participation in the Stony Brook DNA Lab

### **EIGHTH GRADE CURRICULUM**

#### **RELIGION**

In the eighth grade year, students study the Church as one, holy, Catholic and apostolic body. Church history is taught as well as intensive study of the Nicene and the Apostles' Creeds, the sacraments and Beatitudes. Immediate preparation for the Sacrament of Confirmation is done in conjunction with the home parish of each student.

Students will complete several project throughout the year, including a study of a critical analysis of virtues and how they are related to everyday life.

#### **EXTENSION ACTIVITIES:**

- Outreach projects are encouraged in which students assume leadership roles. These can include, but are not limited to food drives, visits to the nursing home, performance for senior citizens and assuming of chores for the elderly.
- Weekly Liturgy class
- Class prepared Mass

### **ENGLISH LANGUAGE ARTS**

The course covers all aspects of English: grammar, punctuation, spelling, vocabulary, structure, writing, and speaking as outlined in the Common Core standards. This program provides all students with proficiency in writing skills and grammar, reinforcement of the correct use of writing conventions, and practice using precise language and subject-specific vocabulary. Students look at words with Greek and Latin roots, and they attempt to determine the meaning of unfamiliar words by looking at context clues.

Students continue to learn how to effectively communicate ideas using appropriate formats for the intended audience in each instance. Time is spent each day writing for different purposes in all subject areas. Emphasis continues to be focused on subject-specific vocabulary and academic vocabulary with the goal of making students strong communicators and analytical readers.

Considerable emphasis is placed on proper grammatical structure in writing, emphasizing variety and complexity in sentence structure, and use of more descriptive terms.

Special writing projects include: arguments, objective summaries, novels, and autobiographical essays. Each student will add

a final draft of their writing projects to their portfolios upon completion. These portfolios are stored until graduation.

Through various, well-designed activities assigned during the school year, students strengthen skills as they prepare for the New York State ELA (English Language Arts) test that is given in April. Preparation for this state-mandated test include nonfiction and fiction close reading activities, essay writing, looking for evidence and details to support ideas, and other specially planned assignments that familiarize students with the format and purpose of the test.

#### **EXTENSION ACTIVITIES:**

- Participation in class and school-wide oratorical competitions
- Participation in annual Young Authors' project
- Participation in Long Island Spelling Bee
- Preparation for High School Entrance Exams

#### **LITERATURE**

Students are required to read aloud to develop proper articulation and enunciation skills, to recognize the relationship between words, phrases, and clauses in sentences and to master the meter and rhythm of what they are reading. They read a variety of literary forms: novels, short stories, essays, poetry, articles, and primary sources. They read superior works of literature by such authors as Charles Dickens, Avi, and William Shakespeare.

The course involves close study of novels and reading comprehension activities based on monthly themes and using essential questions to guide the analysis. Using the Common Core standards as a guideline, students study state-designed modules as well as teacher-created modules. Time is spent analyzing fiction and nonfiction texts during the year. Students work on comparing different viewpoints presented in texts, and they share their findings through writing and discussion. They make inferences as they read, search for evidence to support observations, and analyze literary elements regularly. Students

are prepared daily for the rigor and challenges that await them in high school.

Examples of some of the works studied in this course:

William Shakespeare plays and sonnets

*A Long Walk to Water* by Linda Sue Park

*Nothing but the Truth* by Avi

*A Christmas Carol* by Dickens

*Red Kayak* by Patricia Cummings

*To Kill a Mockingbird* by Harper Lee

*Inside Out and Back Again* by Thanhha Lai

Poetry

Primary sources related to the Holocaust and Civil Rights movements

Historical speeches

Nonfiction articles related to monthly themes

#### **Monthly Themes for Grade 8**

September- Honesty/Truth

October- Perseverance

November- Citizenship/Loyalty

December- Change, Personal Growth

January- Bravery/Heroism

February- Caring/Love

March- Fear/Disbelief

April- Faith

May- Innocence, Racism, Relationships

June- Free Choice

#### **Extension Activities**

- Young Authors' project
- Technology-based projects
- In-class debates
- Creative writing activities

## **SOCIAL STUDIES**

The course begins with the Age of Andrew Jackson. Students discuss and debate the legacy of Andrew Jackson to start the year. Next, students study the events leading up to the Civil War. Following a close study of the Civil War, students examine other important events in our nation's history leading up to modern times. Some of the topics studied in eighth grade include: The Civil War, The Age of Reform, The Great Depression, The Spanish-American War, World War I, Industrialization, World War II, the Holocaust, and the presidencies of our nation's leaders beginning with Andrew Jackson.

Students are taught to recognize cause and effect; to relate certain events to certain time periods; and to analyze historical trends. They also learn that, over time, historical theory and analysis can often change, as new evidence comes to light or new interpretations are brought to bear. They are encouraged to communicate articulately and to argue their viewpoints using facts not opinions.

Students spend considerable time analyzing document-based questions and writing constructed responses and essays involving the full spectrum of topics and periods in American History. This type of work helps to prepare students for the NYS ELA exam given in eighth grade as well as for the challenges that await them in high school.

### **EXTENSION ACTIVITIES:**

- Three-day guided class trip to Washington, DC
- One day guided walking tour of Ground Zero and downtown Manhattan
- Class debates- individual and team- on various topics
- Multimedia projects and presentations

## **MATHEMATICS**

In the eighth grade, students either take Common Core Mathematics Grade 8 or the Common Core Mathematics- Algebra 1 course. **All students** in the eighth grade will take the New York State Common Core Mathematics Grade 8 Assessment in April and May. The courses are outlined below:

### **COMMON CORE MATHEMATICS GRADE 8**

Students will explore the following:

#### **Number Systems**

- Evaluate expressions with integer exponents and utilize the laws of exponents
- Understand scientific notation and complete operations among such numbers
- Work with square roots and cube roots
- Distinguish rational numbers from irrational numbers

#### **Algebra**

- Solve more challenging algebraic equations
- Analyze different cases of solutions
- Solve systems of linear equations graphically and algebraically

#### **Functions**

- Identify functions via tables, graphs, and equations
- Graph linear functions and describe features, such as the slope and intercepts
- Understand how to calculate rates of change in real-world applications
- Write equations for linear functions from word problems
- Compare functions, linear and non-linear, in different forms

#### **Geometry**

- Complete coordinate geometry transformations in the plane
- Describe properties that are preserved and changed after specific transformations

- Connect similar figures to the domains of transformations and slope
- Derive the Pythagorean Theorem and utilize this in applications
- Understand the situation involving parallel lines cut by a transversal
- Continue to strengthen an understanding of volume, by extending to spheres

### **Statistics & Probability**

- Analyze and create scatter plots for bivariate data
- Discuss the cases of association between two variables
- Use correlations to make logical predictions
- Study two-way frequency tables as a means of more concise data display

### **COMMON CORE MATHEMATICS – ALGEBRA 1**

Placement in the Algebra section is determined based upon academic achievement in Grade 7 Mathematics, assessment scores on final exams, and teacher recommendation. Students enrolled in the Algebra class will take the New York State Regents Examination at the conclusion of the course in June. Successful completion of Algebra will lead to high school course credit.

In this course, students will explore the following:

#### **Linear Equations & Inequalities**

- Review how to translate and then solve linear equations and inequalities
- Rewrite formulas in terms of different variables
- Model and work with equations and inequalities in two variables

#### **Systems of Equations & Inequalities**

- Solve systems of equations graphically and algebraically
- Translate systems from word problems that depict real-world applications

#### **Linear Functions**

- Distinguish discrete linear functions from continuous linear functions

- Use the slope in various contexts
- Analyze and work with inverses of linear functions
- Fit lines to data based on correlation, focusing especially on linear regression
- Model situations that are described by linear functions

### **Exponential Functions**

- Compare exponential growth to exponential decay
- Discuss how the change of coefficient and/or base affects such graphs
- Solve equations using exponents
- Perform exponential regression
- Model situations that are described by exponential functions

### **Piecewise & Absolute Value Functions**

- Identify a function as piecewise and be able to explain its meaning
- Graph absolute value functions and discuss transformations that may occur
- Solve absolute value equations
- Model situations that are described by absolute value functions

### **Quadratic Functions**

- Graph and transform quadratic functions
- Solve quadratic equations graphically
- Solve quadratic equations algebraically, especially by factoring and completing the square
- Multiply polynomials and factor polynomials completely
- Derive and use the quadratic formula
- Solve systems of linear-quadratic functions both graphically and algebraically
- Model situations that are described by quadratic functions

### **Data Analysis**

- Define measures of center and spread
- Discuss data distribution and how outliers affect data
- Read and construct histograms and box plots

## **EXTENSION ACTIVITIES:**

- Participation in Math/Physics Day at Six Flags Great Adventure
- Participation in School Math Fair and Math Bee

## **SCIENCE**

In the eighth grade, students take either Physical Science or the Regents Living Environment Living Environment course. Each course is detailed below.

### **PHYSICAL SCIENCE (INTEGRATED SCIENCE)**

The eighth grade students will become acquainted with all the theories of Astronomy. Topics such as the history and age of the universe, formation of the planets, and types of stars are covered in this segment of the course. In addition, the foundations of Chemistry are also an integral component of this year's Science class. The students will work on experiments that demonstrate theories such as atomic structure, and the formation of the Periodic Table of the Elements. Time laws of motion, force, momentum, and the nature of work are discussed. Internet-based projects reinforce and extend students' knowledge beyond the material that is covered in class.

### **REGENTS LIVING ENVIRONMENT (BIOLOGY) AND LAB**

Placement in the Living Environment course is determined based upon academic achievement in Grade 7 Science, assessment scores on final exams, and teacher recommendation. Students enrolled in the Living Environment class will take the New York State Regents Examination at the conclusion of the course.

Students in the 8th Grade Regents Living Environment course are instructed through hands on learning and interactive teaching methods. Under New York State law, students enrolled in any lab

science are required to complete 1200 laboratory hours to qualify to take the Living Environment Regents Examination in June. Successful completion of the Regents examination and course result in high school course credit.

## **Course Outline**

### **I. Unit 0 Introduction to Science**

- a. Laboratory equipment, lab safety
- b. Measurements, conversions, graphing
- c. Scientific Methods

### **II. Unit 1 Biotic/Abiotic**

- a. Life functions
- b. Classification

### **III. Unit 2 Unity and Diversity among Living Things**

- a. The Concept of Life
- b. The Diversity of Life
- c. Structure and Study of Cells

### **IV. Unit 3 Biochemistry**

- a. Carbohydrates
- b. Lipids
- c. Proteins
- d. Nucleic Acids

### **Maintenance in Living Things and Human Physiology**

### **V. Unit 4 Nutrition**

- a. Autotrophic Nutrition
- b. Heterotrophic Nutrition

## **VI. Unit 5 Transport**

## **VII. Unit 6 Respiration**

## **VIII Unit 7 Regulation**

## **IX. Unit 8 Locomotion**

## **X. Unit 9 Reproduction and Development**

- a. Mitosis and Asexual Reproduction
- b. Meiosis and Sexual Reproduction

## **XI. Unit 10 a. Human Reproduction**

- c. Sexual Reproduction in Flowering Plants

## **XII. Unit 11&12 Transmission of Traits from Generation to Generation**

- a. Foundations of Genetics
- b. Modern Genetics

## **XIII. Unit 13 Evolution**

- a. Evidence of Evolution
- b. Modern Theory of Evolution

## **XIV. Unit 14 Ecology**

- a. Ecological Organization
- b. Energy Flow and Material Cycles
- c. Ecological Succession
- d. Biomes of the Earth
- e. Humans and the Biosphere

### **EXTENSION ACTIVITIES:**

- Presentation of a major Science research project at the school fair
- Participation in Chaminade Science Fair
- Participation in Brookhaven Laboratory Science Bowl

## **COMMON STUDIES FOR GRADES SIX, SEVEN, AND EIGHT**

### **SPANISH**

The primary goal of Elementary/Intermediate Spanish (grades 6, 7 and 8) is to introduce, reinforce and develop the student's familiarity with grammatical structures and syntax. Daily class in grade 6 builds on the basics taught in the lower grades and provides a structure for use of vocabulary, sentence structure, conversational skills and reading. Students become involved with the culture of other Spanish speaking countries through dialogues, special projects, monologues, games and songs, all of which incorporate new and more complex vocabulary and sentences structures.

Grade 7 provides more of an opportunity for reading and writing Spanish as well as more intensive conversational skills.

Spanish Grade 8 prepares the students for the New York State Proficiency Examination in Spanish. Successful completion of this test may result in placement in the second year of high school study.

### **EXTENSION ACTIVITIES:**

- Presentation of an assembly program on Spanish culture
- Preparation of Spanish foods

- Lunch at a local Spanish restaurant in which only Spanish may be spoken (7 and 8)
- Viewing of Spanish language films

### **PHYSICAL EDUCATION**

Weekly formal physical education class is taught focusing on age-appropriate organized games and athletic skills, including aerobics, soccer, basketball, volleyball, softball, and tennis.

Students in grades 6, 7 and 8 are invited to participate on school teams through the Catholic Middle Schools Athletic Association in volleyball, soccer, cross country, basketball, baseball and softball, as well as CYO basketball, local track, and cheerleading.

#### **EXTENSION ACTIVITIES:**

- Participation in sports teams with the CMSAA
- Participation in CYO and HYAL athletic teams

### **HEALTH**

The **Health** curriculum for grades 6, 7, and 8 is taught in one trimester modules with class meeting three times each week.

Topics covered (at appropriate emotional levels), in each trimester course include but are not limited to:

- Skin Care
- Dental Care
- Healthy Consumerism
- Nutrition
- Fitness
- Personal Care
- Relationships
- Alcohol and Tobacco
- Violence Prevention
- Bullying

- Safety
- First Aid and CPR

### **LIBRARY/ MEDIA SKILLS**

A comprehensive Library curriculum has been developed for grades 2 to 5. The Curriculum not only provides a basic knowledge of how a library is set-up and how to use the resources available, but also provides cross curriculum activities. In grades 6 through 8, the library will be an extension of the English and Social Studies curriculum. The ELA and Social Studies teacher will direct the course of study that students will work on.

Research skills are introduced in fifth grade and the research project is introduced at the sixth grade level. Ensuing years build on this basic skill. When a student graduates from OLH, he or she should have mastered all the basics of research, cross-indexing, bibliography, source quotations and presentation. The project is done in Library and Computer class. The topic will be based on either the English or Social Studies curriculum.

Integration of library/media skills such as the Dewey Decimal System, Power Point, the overhead projector, computerized database systems and extensive search engines enhance the research activities.

### **COMPUTER**

Students in grades 6, 7 and 8 receive weekly computer lab instruction. Instruction is focused on basic to intermediate computer skills and is heavily tied in with several integrated disciplines such as literature, history, Spanish, library skills, science, art, and other areas. Other skills emphasized are:

- Components and workings of the computer
- Intermediate keyboarding skills
  - Students in grade 6 should be typing at least 20-25 words per minute

- Students in grade 7 should be typing at least 25-30 words per minute
- Students in grade 8 should be typing at least 30-35 words per minute
- Use of the Microsoft Office Suite (Word, Power Point, Excel, Publisher)
- Online publishing tools
- Online databases, including NOVEL (the New York State Online Virtual Electronic Library)
- Use of Google docs and Google forms
- Beginning blogging
- Beginning to intermediate research skills
- Classroom curriculum tie-ins
- Cybersafety (including safety in the use of social media)
- Interdisciplinary research projects
- Video calls via Skype

Upper grade students work with the school's video and digital cameras, SmartBoards, and other electronic media.

All students have access to:

- Grolier Online from Scholastic
- EBSCO Database Package
- The New York State Online Virtual Electronic Library (NOVEL)
- General Science Collection
- Funk & Wagnalls New World Encyclopedia
- INFOTRAC
- Gale Group Databases
- eChalk resources

Students in grades 6, 7, and 8 complete a yearly cross-curricular research assignment that ties library and computer skills into a core subject. Assignments cover material that is relevant to what will be covered in class. All completed final copies of work will be kept and stored until grade 8 as part of a student portfolio.

Students are welcomed into the lab before and after school and during recess for research and project completion

All students are required to have a signed Acceptable Use Policy on file with the school to be able to use the school computers and technology resources. NO EXCEPTIONS.

## **TECHNOLOGY**

The **Technology** curriculum for grade 6, 7 and 8 is taught in one trimester modules, with class three times each week. Projects are hands on and have students use problem solving skills to learn how to create and apply technological and physical concepts.

**Grade 6** focuses on testing physics principles of Newton's laws of motion. Students complete an egg drop project as part of the course.

**Grade 7** focuses on bridge building. Students learn about the specific types of bridges, measurement, how to create and read a blueprint, and create their own balsa wood bridges. Strength is also tested as students measure both the weight of the bridge and compare it to how much the completed project is able to hold. Students will also participate in the Diocesan Technology Day Event at Adventureland.

**Grade 8** focuses on simple and complex machines. Students not only learn about the basic simple machines, but they must apply their knowledge to creating a full scale, working Rube Goldberg Machine. All projects follow the International Rube Goldberg Contest guidelines. Students focus on simple machines, reading and interpreting blueprints, problem solving, editing work, teamwork, and presentations of projects in a public setting (via the Student Art Show).

## **EXTENSION ACTIVITIES:**

- Technology Day event at Adventureland
- Participation in Annual Student Art Show

## **FINE ARTS**

### **MUSIC**

The MUSIC curriculum for grade 6, 7 and 8 is taught in one trimester modules, with class three times each week. The syllabus includes alignment to New York State Standards in the Arts.

#### **Grade 6**

##### Theory and History

- Major and minor key signatures and modes
- The study of modes and their use in various styles, such as chant, jazz and rock, will be integrated with their study of Greek culture in Social Studies.
- Blues scale, 12 bar form, harmony and lyric form
- Students will compose a blues in 12 bar form using the correct scale, harmony and lyric form
  
- Students will study the history of the blues and its many practitioners (with special emphasis on the life and music of Robert Johnson) as well as the creators of early rock and roll
- Jazz (A survey of the styles from the 1920's - 1960's)

#### **Grade 7**

##### Theory and History

- Renaissance and Baroque periods- Sacred and secular music (with special emphasis on the importance of dance forms), composers, and rhythmic devices such as the hemiola will be explored. The music from these periods will be connected with the music in modern artists such as Dave Brubeck, Leonard Bernstein, Led Zeppelin, and Jethro Tull
- The viewing and study of the musical "West Side Story" will be integrated with their study of "Romeo and Juliet" in ELA and Literature

- The study of popular music will be focused on the 1960's and 1970's
- Making of a sound recording (recording, playback, equipment etc...) with a special emphasis on the contributions of Les Paul.

#### **Grade 8**

##### History and Theory

- The music of Stephen Foster and the Civil War
- Classical Period- Composers as well as musical forms will be explored. Students will study the evolution of the movie "Amadeus," including the facts and fiction contained in the film. The unit will conclude with a viewing of the film.
- Romantic, Impressionistic and Modern Periods- A brief overview of each period as well as composition techniques used by its practitioners
- Pentatonic scales, whole scales and the chromatic scale
  
- The study of popular music will be focused on the 1980's and beyond

#### **EXTENSION ACTIVITIES:**

- Student concert at Long Island Philharmonic
- Membership in Band, guitar instruction, rock band, Hamptones Chorus
- Ballet, Jazz, and Tap classes as well as Senior Dance Troupe
- Interactive Music Day
- Adjudication through the New York State School Music Association (NYSSMA)
- Technical squad (sound, lighting, staging), for school shows

## ART

**ART** is taught weekly for grades six, seven and eight and is supplemented by inclusion in the Art Club. Students are taught art appreciation and history as well as technique in drawing, painting and sculpture.

Students are exposed to mosaic, silk screening, metal sculpture, 3-D drawing, pastels, oil painting, graphic design, collage and abstract media.

### **EXTENSION ACTIVITIES:**

- Full in-school gallery Art Show
- Exhibit of student work at the Parrish Art Museum

### **SPECIAL EXTENSIONS AND ACTIVITIES AVAILABLE TO STUDENTS IN GRADES 6, 7 AND 8 IN 2017- 2018:**

- Staff membership on ***The Students' Voice***, the monthly school newspaper
- Peer tutoring opportunities
- Membership on **Student Council**, which plans school dances and school outreach projects
- **Technical Squad**- Students learn to work lighting, sound boards, microphone setup, and other aspects of production for stage

shows. They will be the tech crew for the Christmas and Spring Shows.

- **National Junior Honor Society**- Students will be notified of acceptance into the National Junior Honor Society- Maria Regina Chapter- in the spring of each year. Students must possess a strong academic average, demonstrate leadership in the school community, be involved in school and/or local service projects, and have flawless disciplinary records. All criteria must be met to qualify.
- **Dance Troupe**: Dance Troupe meets during the week. Students dance in the annual Family Advent Service, the annual Seder Meal, and for the Christmas and Spring Shows.
- **Drama Club**- Meets once a week after school. Members perform in the annual Christmas and Spring Shows.

**SPORTS**- OLH participates in the Catholic Middle Schools Athletic Association (CMSAA). We offer teams for the following sports:

- Basketball
- Baseball
- Softball
- Volleyball
- Soccer
- Track
- Cross Country
- Cheerleading