

For 2019-2020





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# INTRODUCTION

Cathedral students are engaged by an active faculty in a rigorous academic program that challenges each scholar to excel. The six-year college preparatory course of study includes a two-year middle school curriculum and a four-year high school college preparatory program.

# **Middle School Program**

The middle school curriculum builds a foundation for future academic success. All students are engaged in the core subjects of Religion, English Language Arts, Mathematics, History, and Science. In addition, students begin the exploration of our Fine Arts Curriculum as well as participate in Physical Education.

# **High School Program**

Cathedral High School prepares our students to pursue post-secondary education. Students are required to engage in and successfully complete a full schedule of courses (seven units) each year of enrollment. A unit of study is the equivalent to a full year course. The following chart identifies the required units of study in each discipline.

English Language Arts4 Units	History and Social Sciences3 Units
Mathematics4 Units	World Languages3 Units
Science4 Units	Fine Arts1 Unit
Electives4 Units	Physical Education1 Unit
Theology3 Units	College Readiness1 Unit

The Principal may approve in writing any waivers, exceptions, additions or substitutions to these requirements. Examples of such include internet courses, internships, and community classroom opportunities. Students are encouraged to explore possibilities and discuss these with guidance before seeking approval.

# **ACADEMIC EXPECTATIONS & SUPPORT**

Students are expected to take a serious approach to academic study, participate in extracurricular activities, share faith through liturgical celebrations, and serve others.

Teachers support students academically with after school help, planned accommodations, and frequent communication with parents and/or guardians.

Cathedral High School recognizes parents/guardians as the primary educators of their children. The school and home must work collaboratively for the benefit of our students. Parents are expected to have their children report to school on time, maintain good attendance, and come to school prepared to take advantage of the opportunity here at Cathedral. Parents are also expected to regularly check Blackbaud, the school's electronic gradebook.

#### **Minimum GPA**

Students are required to maintain a minimum GPA of 2.0 to be a student in good standing. Any student who does not meet this standard or projects to receive a grade lower than a "C" must follow the Academic Improvement Plan written by his teacher(s). The plan will include mandatory after school help.

Students whose GPA falls below a 2.0 when report cards are distributed will be placed on academic probation. The school administration will review the complete record of each student on academic probation, including the student's adherence to any Academic Improvement Plan. Students who are not making satisfactory progress in improving academic performance will not be allowed to remain at Cathedral High School.

# **COURSE LOAD REQUIREMENT**

Students must enroll in a full schedule of seven courses while at Cathedral High School. The Principal may waive this requirement at the request of a student and parent/guardian. Common exceptions to this requirement occur when students are enrolled in courses and programs outside of Cathedral High School or when there is a health accommodation.

# **COURSE SCHEDULE**

Cathedral High School has a seven day/six period cycle. Each class rotates through the cycle meeting six out of the seven days. There are two long periods of 70 minutes and four periods of 50 minutes. Full time courses meet six periods a cycle and receive 1.0 credits, while most electives meet three times a cycle and receive 0.5 credits.

#### **COURSE SELECTION PROCESS**

Students may select courses in the spring for the following year. Electives are limited and preference is given first to seniors, then juniors. While every effort will be made to accommodate each student's selections, conflicts may result in students being assigned to a class in order to have a full schedule.

We make every effort to provide students with their preliminary schedule in June. A final schedule will be available in August. Students may request a schedule change no later than September 15. All requests will be considered, however please be aware that due to class size and scheduling conflicts, changes are rarely able to be made.

**Please note**: Courses that meet three times per week earn 0.5 credits. This is indicated at the end of the course description. All other full-time courses earn 1.0 credits.

# COURSE OFFERINGS

#### **ENGLISH**

#### **Grade 7 English Language Arts (ELA)**

The 7th grade ELA course focuses on developing student skills in reading, writing, speaking, and listening and cultivating an understanding of the elements of literature through close reading, analysis, and discussion. Within the context of poetry, short stories, informational texts, and novels, students will also hone their vocabulary, grammar, punctuation, and media literacy skills. During the first unit, students examine the theme of being in pursuit to analyze the strength of the human spirit against great odds. During the second unit, students investigate the principles of a just society by exploring different cultures, eras, and diverse points of view. During the third unit, students explore the human struggle, the fight for human rights and the determination so necessary for both. Throughout the year, students will complete a variety of homework assignments, in-class and take-home writing assignments, projects, and presentations. Students will work individually and collaboratively with peers and will engage in project-based learning and exploratory learning endeavors.

# **Grade 8 English Language Arts (ELA)**

The 8th grade ELA course builds upon the skills developed in the 7th grade. Students will continue to develop their reading, writing, speaking, and listening skills; using close reading, analysis, and discussion to explore various themes, topics, and literary concepts. They will continue to hone their vocabulary, grammar, punctuation, and media literacy skills in context of the poetry, short stories, novels, and informational texts they read. During the first unit, students will study the literary masters of suspense. After exploring these classic thrillers, students will try their hands at the genre by applying what they have learned to create their own narrative writing projects. The second unit consists of exploring the ramifications of the brave, critical, and illuminating choices that those in extreme conflict are forced to make. During the third unit, students will examine the complexities of how people become who they are as they investigate ways to realize their own potential in the world. Throughout the year, students are expected to complete a variety of homework assignments, in-class and take-home writing assignments, projects, and presentations. Students will also work individually and collaboratively with peers and will engage in project-based learning endeavors.

#### **English I**

The 9th grade English course encourages students to understand, read, and write about the importance of feeling empathy for others, of assuming the responsibilities of leadership, and of pursuing dreams and aspirations. Students will explore these topics and themes through the reading of multiple pieces of literature and informational texts. The unit on empathy examines how human compassion informs our understanding of humanity and the world. The unit on leadership examines the idea of governing and asks the big question: What are the responsibilities of power? The final unit concerns dreams and aspirations and examines what makes a dream worth pursuing. Not only will students be able to analyze the actions and motivations of young characters in relation to these guiding units and essential questions, but will also challenge themselves to think, write, and reflect on their own character, motivations, and passions as they grow. By examining texts in which characters deal with issues and choices pertaining to empathy, leadership, and dreams and aspirations, students will grow in their own awareness and ability to intentionally think about the way they live their lives in school, at home, in their local communities, and as citizens of the world.

# **English II / English II Honors**

In English II, students will build upon lessons learned in English I to read texts across a variety of genres that prompt questions about how much control we have over our lives and what we stand to gain when we share and interact with others. During the first unit, students examine the roles of fate and free will in our lives and attempt to answer the age-old question: How much of what happens in our lives do we actually control? Unit two explores tensions between societal rules and expectations and the implications of challenging these expectations in order to do the "right" thing. The third unit will focus on different kinds of interactions, such as those we share with fellow human beings and with our environment, and explores what these interactions reveal about us as humans. During this course, reading and writing assignments will ask students to think critically about themselves, their communities, and society as a whole. Students will also work to further develop skills to read closely and critically and to communicate arguments and opinions by listening thoughtfully, thinking deeply, speaking articulately, and writing effectively. Daily coursework will include small and large group discussion and independent reading and writing. Most coursework will be completed in class, but some outside-of-school work will be expected to complete reading assignments, weekly homework, as well as larger term papers or projects. Students in English II Honors will encounter additional readings, more frequent and more challenging writing assignments, a faster pace, and higher expectations.

# English III / English III Honors: "American Literature"

In English III, students will build upon lessons learned in English II to read texts of various genres in the American Literature canon, exploring the idea of the American Dream. During the first unit, students will read *The Crucible* by Arthur Miller, exploring the role of religion, Native Americans, and slavery on the American dream. Students will focus on identifying rich pieces of evidence and developing reasoning that analyzes and evaluates evidence to fully support an argument. In unit two, students will explore a more modern example of the American Dream through The Great Gatsby by F. Scott Fitzgerald and will focus on developing close reading skills to break down a difficult text and using figurative language and literary devices to find theme. While students continue to develop their writing and reasoning skills, we will also explore how to speak in front of others, finding ways to be articulate in speech as well as writing. In unit three, students explore how love impacts the American Dream through Jhumpa Lahiri's The Namesake. Students will move towards independence in their close reading and writing skills, focusing their attention on grammar to develop a unique writing style as well as improve one's arguments and persuasion. Overall, students will end the year able to analyze, create and support their own, unique arguments in writing and speaking. They will demonstrate this in a project exploring their own American Dream and their college essays. Students in English III Honors will encounter additional readings, more frequent and more challenging writing assignments, a faster pace, and higher expectations.

#### **English IV: "The Human Condition"**

In English IV, students will build upon lessons learned in English III to read independently, write, and think critically, using classic canonical texts to help find commonalities within the human condition and connect these timeless themes to current events. Students will start the year studying ancient mythology and exploring the elements of storytelling to help polish and finalize their college essays. They will then study Shakespeare's *Hamlet*, encountering college course expectations in reading, writing, and analysis. They will end the year with a collaborative project on current events, combining the analysis and writing skills they have developed with the time management and collaboration they will need to succeed in college.

# Advanced Placement (AP) English Language and Composition

This college-level English course invites students to examine the complex relationship between language and the world. Thematically, this course will focus on real-world issues and multiple perspectives while equipping students with the tools of rhetoric and argument. Students will cultivate critical reading and thinking skills to discuss the meaning, purpose, and structure of non-fiction and fiction texts. While informal writing will be woven throughout the course, students will learn to write in a variety of formal styles to prepare them for the rigorous writing demands in college. Skills for this class focus primarily around rhetorical analysis, writing for multiple purposes, conducting research, and speaking coherently and insightfully about what one has read, written, or researched, as well as studying grammar and syntax to best prepare students for college-level work. (Prerequisites: Approved application based on standardized test scores, GPA, English grades, and English teacher recommendation)

#### FINE AND PERFORMING ARTS

# **Explorations in Art for Middle School**

Students in grades 7 and 8 will begin the exploration of the arts curriculum at Cathedral High School. Mini-units related to the high school curriculum will develop an understanding of the basic ways artists work and are creative. Students will learn how to care for the art studio and tools. Students will understand the connections between art and other disciplines and these connections will be developed and expanded.

#### **Art Studio**

In this course, required for all 9th graders, students will develop and demonstrate their abilities to express themselves through their artwork. The course will focus on building upon the skills learned in the Art Foundations courses. This course will expose students to different art materials and techniques such as drawing, painting, print-making, and sculpture, providing students with the opportunity for individual experimentation. Students will build on their existing art vocabulary as they discuss the art made in class.

# **Art Studio II**

For sophomores wishing to take art, this elective explores deeper the expressive quality of drawing and painting, as students draw connections to their own and the work of different artists. We will look at different mentor artists and experiment with their styles. The course will explore a number of essential questions, including: What is art? How does knowing the contexts, histories, and traditions of art forms help us create our own works of art and design? Why do artists follow or break from established traditions? How does art reflect and shape culture? Why do artists have different styles? How can we talk about art?

(Prerequisite: Art Studio I)

# **Drawing**

Primarily for juniors and seniors, this three day/cycle elective teaches students how to make their visual ideas take form. We will study the basic ways a drawing is made, how to use perspective, and how to set up an interesting composition. This course will focus on developing detailed drawing and rendering skills in different pencil weights, conté, pastel, and charcoal. Students will build upon the skills learned in Art Studio I to bring deeper expression to their drawing. Students will explore multiple techniques and draw with a variety of materials as they learn how to render from close observation and how to use color effectively. In the first half of this course, students will focus on still

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life, learning to draw what they see. The second half of this course will focus on rendering the human figure, creating a self-portrait and learning how to be expressive with drawing. Students will work on drawings both in class and at home as part of their sketch book. Sketch books will be graded as weekly homework. Drawing done on location will be encouraged. Drawings produced in this class are designed for display and can be part of a portfolio to be used for application to an art college. This course will also develop ways to critique artwork.

Please note: This course meets three times a cycle and is a 0.5 credit course.

(Prerequisite: Art Studio I)

#### **Painting**

In this three day/cycle course, students will be exposed to different painting materials including watercolors, acrylics, and oils. We will look at mentor painters and break down how they composed their paintings. We will build a painting-skills tool box based on observation and experimentation. Paintings will be done from observation and imagination. Some of our painting will be on location, thus getting out of the classroom and into the world. By the end of this course, each student will choose a painting material concentration and develop their own ideas and their own artistic expression. This class will stress the building of skills. Students will maintain a sketch book for notes and ideas, and they will produce weekly drawings outside of class.

Please note: This course meets three times a cycle and is a 0.5 credit course.

(Prerequisite: Art Studio 1)

#### Ceramics

Clay is one of the oldest materials used by mankind to make useful vessels. In this clay course, students will focus on the hand-building processes such as slabbing, coiling, pinching, casting, and layering. Throwing on the wheel will also be introduced. In this class students will make mugs, bowls, plates, containers, and servers. As we learn this handcraft, each student will keep a portfolio of work. During the class, we will work together on projects and skills. After learning a specific skill, students will be expected to work independently on their own ideas and manage assignment deadlines. All work should reflect a higher level of thinking with regards to art making. (Prerequisite: Art Studio I)

# **Design Thinking**

In this course students will learn the methodology used by designers to solve complex problems and find desirable solutions for clients. Design Thinking draws upon logic, imagination, intuition, and systematic reasoning, to explore possibilities of what could be and to create desired outcomes that benefit the end user, the customer. In this course, students will learn basic technical drawing as well as drafting skills as they design interior spaces and product packages. Students will build and test prototypes, working from a concept to a finished product, as they develop problem-solving skills. Students must work independently and as a member of a team, managing assignment deadlines. Students will also be required to work outside of the classroom, observing popular culture. All work should reflect a higher level of creative thinking.

(Prerequisite: Art Studio I)

# **Art Journaling**

In this course, young artists will create a visual journal to be used for self-discovery and creativity. Students will gain the courage and freedom to express themselves through a hand-made book using a variety of instructed art techniques. The class will explore the use of multiple media ranging from watercolor, pen, and ink to recycled material. All assignments will be completed in the students' visual journal, while technique practice will be done on separate paper. Students will receive a classwork



grade at the end of each week demonstrating their work ethic and effort. There will be bi-weekly homework assignments in which students will respond to a prompt and create a work relating to it. Students are also required to participate in class critiques. At the end of the school year there will be a personal journal review.

(Prerequisite: Art Studio I)

#### **Portfolio Concentration**

This is the capstone class for college preparation in the study of art. In this course students will demonstrate their abilities to express themselves through their artwork. The course will focus on developing a personal style and concentration while building a portfolio of work that would be acceptable for submission to an art college. Students will choose from a variety of materials with which to work. They will continue to keep a personal sketchbook/process journal as homework. Students will also be responsible for visits to the Museum of Fine Arts, Boston and other galleries and museums as part of their homework and/or a class project.

Students must work independently and manage assignment deadlines. All work should reflect a higher level of thinking regarding art making. All works done in and outside of class will be presented and defended as part of class critiques.

(Prerequisites: Art Studio I, Art Studio II, one additional art elective, teacher recommendation, and sample student work.)

#### **Theater Explorations for Middle School**

In Theater Explorations, students will have many opportunities to engage in dramatic play, improvisation, and theater production. Students will act on a stage and write plays, view performances, as well as design, build and participate in the technical aspects of the theater. Students will develop the tools of the actor including voice, movement, character development, dramatic interpretation and theatrical terminology. This course will provide students with an understanding of the importance of drama as an expression of human experience, as well as an appreciation of the role of the many forms of theater in cultural literacy.

#### **Theater**

Junior and Senior students will focus and refine their developing performance skills through an intensive study of voice, movement, character development, dramatic interpretation and theatrical terminology. This course will provide students with an understanding of the importance of drama as an expression of human experience, as well as an appreciation of the role of the many forms of theater in cultural literacy. Students will have many opportunities to engage in dramatic play, improvise, act on a stage and write plays, view performances, as well as design, build and participate in the technical aspects of the theater. Students in this course will participate in the creation and performance of a school theater production to be presented for an audience.

This class will provide students with tools for critical assessment of what they read, see and hear, with models and standards of excellence, and with a sense of the emotional power of theater, and its ability to stir and inspire an audience.

#### Chorus

As members of the school-wide chorus, students will rehearse music to be shared at communal prayer, Masses, and performed at events outside of the school. The Choral Music program is designed to enhance the musical, creative, and expressive qualities of all students. Musical opportunities are provided for every student to learn the basic skills of singing, playing, and reading music, developing song repertoire, broadening listening skills and experiencing the interrelated nature of music with other cultures and content areas. No prior singing experience is necessary.

There are also opportunities for students who already play an instrument to participate as part of the school band.

Please note: This course meets three times a cycle and is a 0.5 credit course.

#### **Piano and Songwriting**

This course will provide students with the opportunity to learn to play songs on the piano. Students will engage in group piano lessons, structured practice time, and group playing exercises to develop keyboard technique and expressiveness. Students will also learn basic music theory, song-structure, as well as basic songwriting techniques. Students will perform in recitals for their peers, as well as a formal performance for parents. This course meets after school three days per cycle.

Please note: This course meets three times a cycle and is a 0.5 credit course.

# **FOREIGN LANGUAGES**

#### Spanish I

In this introductory course to the Spanish language, students will explore important basic concepts, vocabulary, and cultural aspects of the language. Exposure to the language will involve different methods, including listening, speaking, reading, and writing. Students will be able to make connections with other subject areas and make comparisons with their own language and culture. Students will complete tasks and projects that will help them build skills to communicate in many different ways. This course will demand that students prepare for class thoughtfully and thoroughly, participate in class discussions, and successfully produce a series of projects associated with each of the course units.

#### **Spanish I Honors**

This course will cover the many of the same subject areas as Spanish I, but at an accelerated pace. Previous basic studies in, or knowledge of Spanish or another Romance Language (Portuguese, French, Italian or creole versions) is recommended and will be measured by a written and/or oral exam for incoming 9th graders. By being paired with native speakers, students who enter the school year more advanced will accelerate their development in the Spanish language.

#### Spanish II

The Spanish II course is designed to enable students to communicate with native Spanish speakers and understand their cultures. Students will continue to explore and expand their command of important basic concepts, vocabulary, and cultural aspects of the language, as they will work to master different ways of interacting with the language, including listening, speaking, reading, and writing. Students will be immersed in a classroom where they are largely expected to speak only Spanish. They will be learning various parts of speech (verbs, pronouns, adjectives, etc.), and by year's end students will be able to conjugate three verb forms in several tenses.

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# **Spanish II Honors**

Entrance into Spanish II Honors is by approval of the instructor and based on performance in Spanish I of the previous school year. This course is recommended for native speakers. Any new students wishing to take Spanish II Honors, will have to take a written and oral exam in order to be admitted into the course. This course will enable the student to communicate with native Spanish speakers and understand their cultures. Students will continue to explore and expand their command of important basic concepts, vocabulary, and cultural aspects of the language, and they will work to master different ways of interacting with the language, including listening, speaking, reading, and writing. They will be learning various parts of speech (verbs, pronouns, adjectives, etc.), and by the end of the year students will be able to conjugate the three verb forms in several tenses. (Present, Imperfect, Preterite, Future and Present Participle) Students will be immersed in a classroom where they are expected to speak only Spanish.

#### Spanish III

In this course, students will be reading *Tinita*, the story of a teenage girl from Monterrey, Mexico, whose family immigrates to Denver, Colorado. The book consists of 15 chapters and includes comprehension and discussion questions as well as a glossary at the back of the book. Students will be immersed in a classroom where they are expected to speak only Spanish. Students also will learn various parts of speech (verbs, pronouns, adjectives, etc.) as well as vocabulary associated with travel, kitchen and food, country versus city living, and clothing. Students will be able to successfully conjugate three verb forms in several tenses, as they learn about the culture of Spain and other countries. This course will demand that students prepare for class thoughtfully and thoroughly, participate in class discussions, and successfully produce a series of projects associated with each of the course units.

#### Spanish IV

In this course students will apply the rules learned in Spanish I, II and III. Students will gain an understanding of the importance of foreign language as it relates to gleaning information. Students will become aware of how studying Spanish can improve their career opportunities. Students will gain an understanding of culture and the origins of the Spanish language, as well as how it is used currently. Students will grow to understand the importance of context clues when deciphering the meaning of a text as well as the role of religion in the foundations of the Spanish language. Students will appreciate how learning about other cultures and the origins of these cultures helps to shape other people's perspectives and how these perspectives relate to religion.

#### French I

French I focuses on building strong vocabulary bases and simple grammar structures. French I also provides an initial introduction to French culture and traditions. Throughout the year and in each class, students learn French through reading, writing, listening, and speaking activities, consistently supported by fun and educational games, singing, and other creative approaches.

#### French II

French II is conducted primarily in French. By the end of the year students will be able to use French to describe themselves, and their family and friends. In addition, students will learn to talk about their personalities; their likes and dislikes; daily activities and possessions; foods, beverages and healthy nutrition; their home and city; clothes and fashion; and sports and entertainment. Students will also answer questions and learn to narrate in the past and future. The class will expand on the themes studied in French I, emphasizing daily participation and mastery of grammatical structures and vocabulary needed to communicate effectively.

#### French III

The objectives of French III are to use and understand intermediate-level vocabulary and discuss personal and simple social topics with more grammatical accuracy and speed. Students will also learn to read texts written for French native speakers with increased understanding and better understand the linguistic and cultural heritage of French speakers around the world.

#### **Advanced French**

Few activities reinforce the learning of a language as well as teaching that language to others. Two to four outstanding French students will be selected to serve as Teaching Assistants supporting younger students in French I and French II classes. They will perform dialogues in French and help students when they need support. In addition, each week, they will pursue their own language studies independently, reading and analyzing French novels and watching and critiquing French videos.

#### **HISTORY**

#### **Grade 7: Social Justice and World Geography**

In this course, 7th grade students will learn about the geography the United States and of the world around them. Students will also study and assess how the geography of our world both creates social justice issues and affects others that are ongoing. Course topics that will be covered include the impact of global warming in Antarctica, the aftermath of unjust systems such as apartheid in South Africa, and the stages of development and production of a sneaker sold in the United States. By the end of this course, students should be able to connect their own life and community with the larger world community and apply concepts learned to address future social justice issues as they appear.

#### **Grade 8: African-American History**

This course will provide 8th grade students with an introduction to United States history. In this course, students will learn about the history of the United States through the lense of the African American experience. Beginning with the colonization of the Americas, students will identify how African Americans have played a role in the development and evolution of the United States. Course topics include slavery, the Missouri Compromise and Dred Scott Decision, the Civil War and Reconstruction, the Civil Rights Movement, and African Americans in sports. By the end of the course, students will be able to connect the history of African Americans in the United States to where we are now and how they can contribute to the preservation and continuation of that history through their own actions both within and outside the classroom environment.

# World History I: "Leadership for the People"

This freshman World History course builds off the middle school themes of social justice. The course focuses on famous and infamous leaders, their impact on the rights of the citizens living under their rule, the legacies of these leaders in the modern world, and the relationship between leadership and the overall evolution of human rights. Topics of study will include the power of religion in Europe, the effect of the advancement of science and technology on the world and on the Church, the causes and impact of both World War I and World War II, and the significance of the Cold War to our world today. Students will utilize a variety of means of learning including primary source review, textual analysis, monthly essay writing assignments, debates, documenting evidence, and defending their claims. By the end of the year, students will understand not only how a leader impacts human rights, but also how they can personally develop a leadership style and be an advocate for human rights and social justice.

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# World History II: "The Political Economy of Injustice"

This sophomore course will focus on events in world history that highlight how money, resources, and greed can lead to the oppression of the poor and vulnerable and create marginalized communities around the world. Juxtaposing these events with the seven themes of Catholic Social Teaching will show the true scope of injustice. This course will analyze topics such as classism, imperialism, and globalization in order help students understand not only the basics of economics, such as supply, demand, and opportunity cost, but also the economics of injustice. As students analyze these topics, they will be challenged to work towards mastery of a variety of social justice and history skills, especially their ability to develop empathy, create connections, and evaluate historical events. Furthermore, this course will pay special attention to students' writing skills, help them build upon what they've learned in 9th grade, and increase the academic and scholarly nature of their writing.

# United States History: "Social Justice, Law, and Human Rights in America"

By considering different historical "-isms" (federalism, expansionism, racism, etc.), students will explore how the essential themes of social justice, law, and human rights have developed over the course of our country's history. The course will consider an array of sources, including textbook accounts, essays, scholarly articles, speeches, and other primary documents. Students will develop skills such as particular analytical reading, thinking, and writing; note taking; and research and presentation. In addition, this course will guide students to look at issues from a Catholic perspective and give them the tools needed to identify both the beneficial and harmful systems that are interwoven into the fabric of U.S. society. The course will empower students to follow the words of Proverbs 31:9, to "judge righteously" so that they will one day be prepared to "defend the rights of the afflicted and needy."

#### **Law & Society**

This elective course will encourage students to explore how the law relates to their own communities and society as a whole. Students will begin with an overview of the purpose and intentions behind the United States Constitution and a study of the Bill of Rights. Students will then apply constitutional amendments to their own lives and communities through the study of laws and Supreme Court cases. The class will be challenged to explore the concept of justice and injustice in the context of the law and how that plays out in society. Students will consider multiple perspectives of the relationship between the law, justice, and society in the United States including racial, religious, and social justice.

Historical events and issues to be explored include slavery, the 13th Amendment, and the "new Jim Crow," as well as race, gender and sexuality, immigration rights, criminal justice, the war on drugs, mass incarceration, law enforcement, and Native American rights. Critical attention will also be paid to juvenile justice and student's rights within schools. The learning experiences will include a tour of the Suffolk County Jail and a courthouse.

Please note: This course meets three times a cycle and is a 0.5 credit course.

#### The History of Boston

This senior elective is designed not only to give students an overview of the history of their hometown, but to focus on the treatment and rights, of different demographics in this city over time. During the first half of the year, this class will survey Boston history and focus on topics like the Massachusetts tribe, the Molasses Flood, mob figures, busing, and sports culture. In the second half of the year, students will focus in on one neighborhood in Boston and create a college-style thesis about an element of this neighborhood's history.

Please note: This course meets three times a cycle and is a 0.5 credit course.

(Prerequisites: United States History)

#### **Modern United States History**

A continuation of both the middle school American history classes and 11th grade's United States History, this senior elective picks up where 11th grade left off. This class will take an in-depth look at the events that shaped the past 60 years including the Korean Conflict, America's involvement in Vietnam, the race to the moon, the Cold War, the war on drugs, the rise of the internet, and life in American after 9/11. Each decade will present its own unit. A strong focus will be placed on the cultural significance of the historical events and how this culture contributed to the events. The course will prepare the students for a college-level experience where students will be responsible to check deadlines, complete assignments outside of class, and be prepared to discuss current events that correlate to the subject matter.

(Prerequisites: United States History.)

#### **Civics**

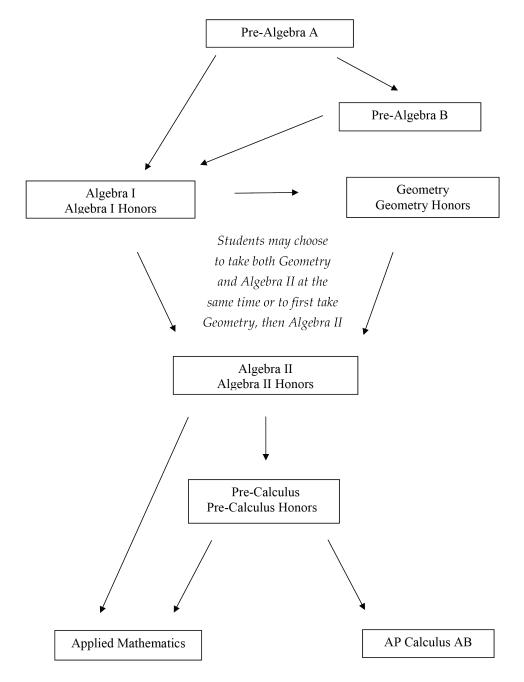
This senior elective explores the structure of the United States government from a national and state perspective with an emphasis on the individual citizen, their role within government, and how changes can be made through representation. This course will challenge students to learn and understand essential concepts and philosophies that led to the formation of the United States Constitution and the election process of our republic. Students will be expected to analyze the political process, the formation of political parties, the Electoral College, the election process, and influences that affect them all. A major focus of the class will involve reviewing significant elections over the course of American history and evaluate how candidates succeeded or failed.

(Prerequisites: United States History.)

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# **MATHEMATICS**

# **Typical Sequence of Courses**



# Pre-Algebra A

In Pre-Algebra A, 7th grade students will receive instruction in, and demonstrate the ability to, perform basic mathematical functions and problem solving in the areas of addition, subtraction, multiplication, and division of whole numbers, decimals, and fractions. Students will develop a facility with numbers, and will be encouraged to develop a problem-solving mindset enabling them to consider mathematical challenges in different ways. They will consider the usefulness of math as they apply their knowledge and skills to real-world situations.

Other topics of study will include: prime numbers, composite numbers, ratio, proportion, and percentages; introductory geometry (lines, angles, triangles, quadrilaterals, and polygons); measurement, including surface area and volume; probability; statistics (reading and comparing whole numbers, and understanding mathematical expressions in written materials). Solving one- and two-step linear equations will be introduced and used in practice with numbers and to solve geometry problems. Highly successful students in this class will be encouraged to take Algebra 1 in 8th grade.

#### **Pre-Algebra B**

This 8th grade course provides the mathematical foundations needed for success in algebra, geometry, and general problem solving. Students will build study and note-taking strategies to help develop their learning skills. This course will: hone problem-solving skills (challenging problem-solving practice, in context, and clear presentation of key concepts will prepare students for algebra courses); develop active learners (note-taking strategies, vocabulary review, and a focus on margin notes will guide students to develop study skills and conceptual understanding); promote achievement and success (practice with test-taking strategies and varied question formats, in print and using integrated technology resources, will build the confidence and problem-solving skills needed to achieve success); and connect mathematical concepts to real-world scenarios. Topics of study will include: variables, expressions, and integers; solving equations; multi-step equations and inequalities; factors, fractions, and exponents; rational numbers and equations; ratio, proportion, and probability; percentages; linear functions; real numbers and right triangles; measurement, area, and volume; data analysis and probability. Students in this class will take Algebra 1 in the 9th grade.

#### Algebra I / Algebra I Honors

This course is designed for students who have demonstrated basic pre-algebra skills such as adding, subtracting, multiplying, and dividing positive and negative integers and solving basic one- and two-step equations. The purpose of Algebra I is to increase student awareness of the importance of mathematics in the modern world. Students will become more confident in their ability to work with mathematical concepts and relationships. They will learn how to think systematically and use the precise logic required for mathematical problem solving.

This course builds on students' understanding of basic mathematics in the study of algebraic skills and problem solving. Students will learn to express real-world problems in algebraic sentences in order to find solutions. This course is the foundation for high school mathematics courses and the bridge from the concrete to the abstract study of mathematics. Topics include modeling real world scenarios with algebraic functions, simplifying algebraic expressions, evaluating and solving linear equations and inequalities, using the properties of positive and negative exponents, solving systems of equations and inequalities, adding, subtracting, and multiplying polynomials, solving quadratic equations, and graphing linear, quadratic, absolute value, and exponential functions and relations. Real world applications are presented within the course content.

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The Honors version of this course will involve a faster pace, a more significant workload, and greater depth of coverage of certain topics. Honors students can expect longer and more frequent assignments and assessments. Highly successful students wishing to accelerate in math should consider taking both Geometry Honors and Algebra II Honors as sophomores in order to reach AP Calculus AB as seniors.

# **Geometry/Geometry Honors**

This course is designed for students who have successfully completed Algebra I. The course emphasizes the properties and applications of common geometric figures in two and three dimensions. Students will learn how to think systematically and use the precise logic required for mathematical problem solving. Geometry students will be able to read, analyze, and solve right triangle and trigonometric functions within contextual situations. Topics in the course include essentials of geometry (points, lines and planes), angle pair relationships, parallel and perpendicular lines, congruent triangles, relationships within triangles, similarity, right triangles and trigonometry, quadrilaterals, properties of circles, and length and area. Successful completion of this course will prepare student for Algebra II or Algebra II Honors. The Honors version of this course will involve a faster pace, a more significant workload, and greater depth of coverage of certain topics. Honors students can expect longer and more frequent assignments and assessments.

# Algebra II/Algebra II Honors

This course assumes successful completion of, or current enrollment in, Geometry or Geometry Honors. The majority of the students will take either Pre-Calculus or Pre-Calculus Honors the following year. The course is inspired by the Algebra II material that is found on the PSAT and SAT. Students will cover in greater detail and at a higher level of difficulty, such topics as linear functions, systems of linear equations, and parabolas. They will also encounter new topics such as function notation, non-linear systems of equations, square root functions, exponential functions, and an introduction to trigonometry. Algebra II Honors will include additional units covering advanced methods of factoring, quadratic word problems, and an introduction to the unit circle. The Honors version of this course will involve a faster pace, a more significant workload, and greater depth of coverage of certain topics. Honors students can expect longer and more frequent assignments and assessments.

#### **Pre-Calculus/Pre-Calculus Honors**

This course follows the successful completion of Algebra II or Algebra II Honors. It will emphasize the Pre-Calculus material covered by the SAT and ACT for the majority of the course and will end with an introduction to the first unit of a typical college Calculus course. Course topics include applications of quadratics, exponential and logarithmic functions, trigonometry (including the unit circle and sinusoids), rational functions, and an introduction to limits. Pre-Calculus Honors will include additional assigned summer work units including sequences and series and parametric equations. The Honors version of this course will involve a faster pace, a more significant workload, and greater depth of coverage of certain topics. Honors students can expect longer and more frequent assignments and assessments.

# **Applied Mathematics**

This course combines statistics and financial algebra. The course introduces students to the basics of statistical testing. Students learn to organize, display, and analyze data and to explore the elements of probability. It is also designed to help students see the mathematics behind finance. Through group presentations, online research, and collaborative lessons, students will explore the algebra behind break-even points, taxes, loans, mortgages, and other real-world financial topics. Students will plan

budgets, analyze stock values, and practice statistical interpretation. Seniors placed in another 12th-grade math class may opt also to take Applied Mathematics as an elective. (Prerequisite: Algebra II.)

#### Advanced Placement (AP) Calculus AB

An Advanced Placement (AP) course in Calculus consists of a full high school academic year of work that is comparable to a one-semester Calculus course in colleges and universities. AP Calculus will follow the topics outlined by the College Board. The course is primarily concerned with developing students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations are demonstrated through the unifying themes of derivatives, integrals, limits, approximation, applications, and modeling. Graphing calculators will frequently be used in class to observe and analyze graphs and other relevant data. Opportunities will arise for students to demonstrate verbal understanding by explaining concepts to peers. Various activities and discussions will provide opportunities to reason with theorems and definitions. Students will be exposed and expected to use, proper notations consistently. The main objective of this course is to prepare students for the AP Calculus AB exam to be given in the spring. Students are required to take the exam in order to receive credit for the class.

# **RELIGION**

# **Grade 7 Religion: "Introduction to the Bible"**

This course will introduce the Bible in its entirety, with a special emphasis on the Good News of Jesus as revealed in the Gospels. Aligned with the Archdiocese of Boston's Faith Formation Standards, student exploration of Sacred Scripture will be centered around the essential question: "How does understanding scripture help us to grow in the knowledge and love of Jesus?" Students will analyze the books of the Bible to find the spiritual truths within the historical life of Jesus. Students will identify the significance of the passages for the people of the day, as well as for the modern reader. As they compare and contrast various dramatic interpretations of biblical events with scriptural accounts, they will sharpen their skills of creative interpretation with the aim of creating one of their own interpretive accounts.

Throughout their studies, students will come to understand the liturgical rites of the Church as expressed throughout the year and epitomized in the celebration of the Eucharist, the source and summit of Christian life. Embedded within the year will be learning opportunities designed to teach conversation etiquette as students actively practice building on the viewpoints of others and synthesizing varying perspectives as they explore their faith through Sacred Scripture. The experience will also include a study of Pope John Paul II's "Theology of the Body" and students will begin their study of the archdiocesan-mandated curriculum "Created for Love."

#### **Grade 8 Religion: "Understanding Catholic Christianity"**

Building on the foundation of the gospels, this course will introduce the basic teachings of the Catholic Church, with a special emphasis on the sacraments as privileged encounters with Jesus Christ. Students will strengthen their understanding of the liturgical rites of the Church as expressed in the Church year and epitomized in the Eucharist, the source and summit of Christian life. Aligned with the Archdiocese of Boston's Faith Formation Standards, students will also study Sacred Scripture as they explore essential questions such as "Who is Jesus and what do we believe about Him? How does living a moral life help us to live a life of discipleship in Jesus? How does understanding scripture

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help us to grow in the knowledge and love of Christ? How does prayer deepen our relationship with the Holy Spirit and draw us closer to Christ? How does Jesus' mission continue in the Church today? How do we respond to the call of Jesus in our lives?"

Students will build on the foundations of conversation etiquette and creative interpretation. Through these skills, students will demonstrate the importance and method of making good decisions, especially in areas of relationships. Students will also explore Pope John Paul II's "Theology of the Body" in greater depth and complete their study of the archdiocesan-mandated curriculum "Created for Love."

# Religion I: "The Old Testament"

This course will critically examine the Old Testament as we wrestle through one of the oldest and most influential texts in the world. As we study a text that more than half of humanity today considers sacred, participants will seek to understand the Hebrew people of 4,000 years ago by learning their history, literature, and poetry as they wrestled with God. The class will learn the proper historical contexts in preparation for comparing the Old Testament with our lives today.

Students will develop and strengthen core skills over the course of the year related specifically to understanding, analysis, creation, and reflection. Students will increase their overall understanding through paraphrasing and decoding scripture and by consistently working on improving reading comprehension. Students will build their analytical skills by making connections between the people and events in the Bible and their own lives, as well as by critically and analytically examining plot and engaging in media literacy through examining movie clips and images. Finally, students will engage in creation and reflection as they apply the knowledge they have learned, producing elaborate writing reflections in the form of five-paragraph essays, practicing public speaking, and presenting creative art forms consisting of awareness campaigns, children's books, YouTube videos, PowerPoints, poems and other creative means of expression.

#### Religion II: "The New Testament and the Church"

The course will focus on the life, teachings, miracles, Passion, death, and Resurrection of Jesus Christ. An essential goal of this course is not merely the teaching of a body of abstract truths, but the communication of the living God as revealed in Christ Jesus. This course will explore the Gospels, the letters of Paul, other Canonical witnesses, and the Johannine writings; particular focus will be placed on current Christian practices and their origins as revealed in the New Testament.

Students will read significant and substantial parts of the New Testament, gaining familiarity with New Testament characters and themes. Ultimately, the intent of the course is to draw students' awareness to patterns of living that lead to human flourishing. To this end, this course involves various exercises, prayer reflections, discussions, and activities to involve the whole learner: head, heart, and body. In all this, the overarching aim is to provide students with tools and skills that will give their lives meaning and direction. While the course will include objective assessments, it will especially encourage active class engagement with an emphasis on critical thinking.

#### **Religion III: "Moral Awareness"**

In this moral awareness course, students will become mindful of how our everyday choices influence who we are and who we are to become, ultimately leading to our destiny. God has gifted us with a great capacity and power to love, and with that gift comes the responsibility to extend that love out into the world. That can prove to be challenging for young adults as they begin to navigate a complicated world. With Jesus by our side as the perfect model, students will learn how to fulfill that

responsibility and become the best, most loving version of themselves. In His infinite wisdom, God has also given us our families, community, laws, Scripture, the Church, and most importantly, God Himself. Students will study and practice how to utilize these sources of helps, learning to listen for God's voice working through the people, events, and resources in their lives. As they strengthen their connection with their conscience, that which connects them to a loving Creator, they will make more loving, responsible choices.

#### Religion IV: "Catholic Social Teaching"

As they complete their tenure at Cathedral High School, and build upon the wealth of experiences they have acquired to this point, seniors are ready to make their mark by recognizing, understanding, and meeting needs in their community and beyond. Anchored in the seven Catholic Social Teachings, students will examine God's call to participate in the mission of restoring our relationships and our society to their original goodness, through charity and social action. Provided with the proper tools, seniors will practice leadership in causes about which they are passionate culminating in a capstone project and participation in our Social Justice Fair. This leadership opportunity entails giving attention to reliable sources of information about current events, prioritizing and narrowing one's focus on a particular social injustice, researching the causes of this injustice, and leading others to take action.

# SCIENCE

#### **General Science**

General Science introduces students to life, physical, and environmental sciences. Students use the scientific method through hands-on lab activities, open-ended investigations, and collaborative work. Group projects and activities will provide students opportunities to investigate topics of relevance to their own lives and build a general understanding of essential scientific inquiry and methods. Topics include: classification of plants and animals, systems of the human body, Earth science, and matter and its phases. In this course, 7th grade students develop and apply observational skills and active listening skills to construct hypotheses and test them in experiments.

# **Physical Science**

The 8th grade physical science curriculum provides students opportunities to practice and master their scientific skills as they explore both concrete and abstract concepts. This course acquaints students with the physical and chemical worlds that surround them. It will continue to build on skills of systematic investigation with a clear focus on variables. Students will engage in labs, open-ended investigations, and collaborative work. Major areas covered include: the periodic table, matter, energy, sound, light, magnetism, and electricity. Students continue to build on their communication skills as they report their lab findings.

#### Chemistry

Required of all 9th grade students, Chemistry examines the behavior of matter and its reactions. Students study the rules that govern the relationship between matter and energy. Students are expected to follow all lab safety protocols, procedures, and techniques as they perform experiments to collect data for analysis. Instructional emphasis is placed on problem solving, analytical skills, projects, and laboratory experience. Topics include: matter, measurement, the periodic table, chemical reactions, stoichiometry, bonding, redox, and acids and bases. Students use quantitative and qualitative data analysis to prove or disprove their hypotheses, and they employ deductive reasoning to evaluate their conclusions.

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#### **Biology**

This course, primarily for 10th grade students, examines the behavior of living organisms and their environments, with special attention to the expansion of scientific knowledge that has developed in the 21st century. Modern technology has improved tools, techniques, methods, communication, and transportation, all of which have produced an accumulation of new information as well as reinterpretations of old information. These developments have changed the way scientists think about biological processes. In this course, students investigate the processes that allow organisms to function and grow. Instructional emphasis is placed on projects and laboratory experience. Topics include: cells, genetics, comparative anatomy, ecology, evolution, and biodiversity. Students use research, data analysis, and critical thinking skills to evaluate biological processes.

# **Introduction to Engineering Design**

This full-year course, available to juniors and seniors, focuses on using the engineering design process to find, develop, and produce solutions to practical, everyday problems. Students will apply their existing skills in mathematics and science and use the engineering design process to solve problems and develop products using an applied-learning, project-based approach. Through a series of applications and projects, students will develop the framework and skills required for analytical problem solving and decision making. The applications and projects will be drawn from applied physics; the mechanical and electrical components and their interfaces will involve basic principles of electrical and mechanical engineering. Students will have the opportunity to hone their skills working in teams, communicating with their peers, and documenting their work.

The major building blocks of the course will include computer hardware, computer software, and the electronic/mechanical interfaces necessary to provide application solutions. Computer hardware topics will include processors, main memory, input/output devices, storage, sensors, and communication. Software topics will include programming (creating the logic, algorithms, data structures, and interfaces necessary to provide the application solution) and coding (translating the results of the programming effort into Python software code that will run on the computer). The hardware, software, and electronic/mechanical interfaces will then be tested and integrated to demonstrate the application solution.

#### **Anatomy and Physiology**

This science elective, primarily offered to seniors, examines the relationship between the organization of cells into tissues and the organization of tissues into organs. The structures and functions of organs determine their relationships within body systems of an organism. It is an intensive course which explains the 11 body systems and homeostasis. Instructional emphasis is placed on lecture, projects, simulation cases, clinical skills stations, and laboratory experience. Topics include: cells, tissues, the skeletal system, the muscular system, the nervous system, the endocrine system, blood, the cardiovascular system, the lymphatic system, the respiratory system, the digestive system, the urinary system, and the reproductive system. In this course, students use case analysis to interpret conditions of the human body.

(Recommendation: Chemistry and a B average or better in Biology.)

# **Environmental Science**

Environmental Science, an elective offered to juniors and seniors, examines the Earth's behavior and its interactions with organisms. Students will use the Earth's history and geoscientific data to consider the causes for the changing earth. This course explores all factors affecting the Earth and its environment. Students investigate the natural world and systems using models, interpreting data, designing solutions, and conducting lab experiments. Topics include: Earth's systems, the living world,

population, resources, climate change, and human sustainability. In this course, students use current impact data to evaluate global change.

(Prerequisites: Chemistry and Biology.)

# **Biology II**

Biology II is an advanced life-science course, an elective offered to juniors and seniors. Biology's key concepts and unifying themes work together to help students develop a coherent view of life and the exhilarating progress in our understanding of life at all levels, from molecules and cells to ecosystems and the biosphere. This course will help students develop positive and realistic impressions of science as a process of inquiry. Topics include: microbiology, genetics, the mechanisms of evolution, the history of biodiversity, body's defenses, animal reproduction, and sensory and motor mechanisms. Students will investigate these topics through case studies, projects, and lab experiments. (Recommendation: Chemistry and a B average or better in Biology.)

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