

St. John Paul II Catholic High School



Course Catalog 2018-2019

Diocese of Birmingham in Alabama



The Diocese of Birmingham in Alabama

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Introduction

Welcome Statement

We extend a warm welcome to each student and family of the St. John Paul II Catholic High School community. Each family brings unique personal qualities to our school. As students, parents, and school staff, we must work together to blend these qualities into a thriving Christian community. In choosing St. John Paul II Catholic High School, you have indicated a willingness to accept and promote the values and philosophy of a Catholic school. We invite all students to take full advantage of all opportunities for personal growth as they continue to discover their individual talents.

Established in 1996, St. John Paul II Catholic High School is a Roman Catholic college preparatory school for students in grades 9-12. The school functions under the sponsorship of the Diocese of Birmingham and is a member of the National Catholic Educational Association. St. John Paul II Catholic High School is accredited as a college prep school by the Southern Association of Colleges and Schools and is a member of the Alabama High School Athletic Association.

Our Vision

St. John Paul II Catholic High School teaches as Jesus did, challenging, loving, and guiding our young people to develop their God-given gifts and talents to be academically prepared, socially responsible, humble in service to others, and active participants in the life of the Church.

Our Mission

St. John Paul II Catholic High School develops young people in spirit, mind and body to foster a lifelong discipleship of Christ in the sacramental life of the Church. We encourage, challenge, and support each student to learn enthusiastically, lead honorably, and live responsibly.

Our Values

Faith and Service – We practice the teachings of the Catholic Church and call each member of our community to a life of ministry and service.

Dignity and Diversity – We honor and respect individuals, embracing differences in a unified loving community.

Excellence and Quality – We promote the highest standards of achievement in our four pillars of Academics, Arts, Athletics, and Spiritual formation.

Academic Program

At St. John Paul II Catholic High School, the college-preparatory curriculum provides all students with a foundation for higher learning. Electives enable students to individualize their academic program by catering to a variety of the students' own personal interests. Our students are prepared for entry into rigorous college programs.

The St. John Paul II Catholic High School faculty consists of 44 teachers, a media specialist, and a Director of Counseling Services. Administration includes the Principal, Assistant Principal of Academics and Athletic Director. The St. John Paul II Catholic High School staff is dedicated and determined to provide the students with a quality education in a caring, Christian environment. The student/faculty ratio is 14:1.

Graduation Requirements

All students graduating must satisfy the credit requirements listed below. Students must also complete **100** hours of Community Service as a graduation requirement.

<u>Required Subjects</u>	<u>Credits</u>
Theology	4.0
English	4.0
Mathematics <i>(Algebra I, Geometry, Algebra II/Trigonometry)</i>	4.0
Science <i>(Biology, Chemistry, Physics required)</i>	4.0
Social Studies	4.0
World Languages <i>(2 consecutive years of the same language)</i>	2.0
Fine Arts	1.0
Physical Education	1.0
Electives	3.0
Health	0.5
Career Preparedness A	0.5
Career Preparedness B	0.5
One hundred hours of Community Service	<i>no credit</i>
Research Paper in the Senior Year	<i>no credit</i>
Total Credits Required for Graduation	28.5

Administration reserves the right to substitute and/or waive course(s) or graduation requirements due to schedule conflicts or extenuating circumstances for any transfer, International, or other students.

Advanced Placement (AP) Courses

AP Courses offered include:

Biology	European History
Calculus AB	U.S. Government
Chemistry	U.S. History
English-Language and Composition	World History
English-Literature and Composition	Physics 1 & 2
Computer Science A	

(Transfer students who wish to take the AP courses must have been on a college prep track and have maintained a B+ average in all related subject areas.)

Dual Enrollment

St. John Paul II Catholic High School participates in the Dual Enrollment programs at the University of Alabama in Huntsville (11th and 12th graders only) and at Calhoun Community College (10th, 11th, and 12th graders). Students who enroll in either of these programs must meet UAH or Calhoun Community College Dual Enrollment eligibility requirements and have permission from JPII Administration. Students register for classes through the college but must have forms signed off by the Counseling Department. Students should seek classes that least interfere with their JPII schedule. Senior Privilege will be a priority for students taking these classes. Such courses appear on the student's transcript designated as "UAH" class.

While most colleges accept Dual Enrollment course credits, it is the student's responsibility to petition his/her college of choice to accept transfer credit for Dual Enrollment classes. Dual Enrollment courses receive a 0.5 credit qualifier on the student's GPA.

Pathways to College and Career Readiness

St. John Paul II Catholic High School offers Pathways to College and Career Readiness to assist students in their academic planning. These pathways work in conjunction with the required College Preparatory classes. They include suggested Math and Science electives where applicable as well as general electives. The list also includes suggested extra-curricular activities to enhance their high school experience.

Engineering

Courses include:

- Science: Honors Physics (if the student takes Conceptual Physics as a sophomore, it is recommended that they take Honors Physics as a senior), AP Physics or AP Chemistry
- Math: Pre-Calculus, Calculus or AP Calculus
- General: Engineering Design (1 semester), Programming

Extra-curricular activities include:

- Science Olympiad, TARC (Rocket Team), Math Team, Cyber Patriots

Health Science

Courses include:

- Science: Anatomy/Physiology, AP Biology, Forensics (1 or 2 semesters)
- General: Sports Medicine, Psychology, Life Fitness, Advanced Sports Training

Extra-curricular activities include:

- Science Olympiad, Student Athletic Trainer, Love is Louder

Business

Courses include:

- Math: Statistics
- General: Accounting, Yearbook, Public Speaking (1 semester), Economics (1 semester), Contemporary US History (1 semester)

Extra-curricular activities include:

- Future Business Leaders of America, Student Council

Communication/Mass Media

Courses include:

- General: Film Exploration and Production, Yearbook, Public Speaking (1 semester), Contemporary US History (1 semester)
- Fine Arts: Technical Theatre (1 or 2 semesters), Drama I, Art I

Extra-curricular activities include:

- Epiphany, International Thespian Society, Art Club, Improv, Student Council

Humanities

Courses include:

- English: AP English Language & Composition, AP English Literature & Composition
- Social Studies: AP US History, AP European History, AP Government
- World Language: 3-4 years of a language
- General: Creative Writing (1 or 2 semesters), Public Speaking (1 semester), Contemporary US History, Human Geography (1 semester), Physical Geography (1 semester), Psychology, Economics (1 semester)

Extra-curricular activities include:

- Scholars Bowl, Culture Club, Foreign Language Club, Improv, Poetry Club, Student Council, Campus Ministry, Liturgy Alive, Retreat Team, Pro-life Club

Religious Ministry

Courses include:

- General: Psychology, Public Speaking
- World Language: Latin
- Social Studies: AP European History

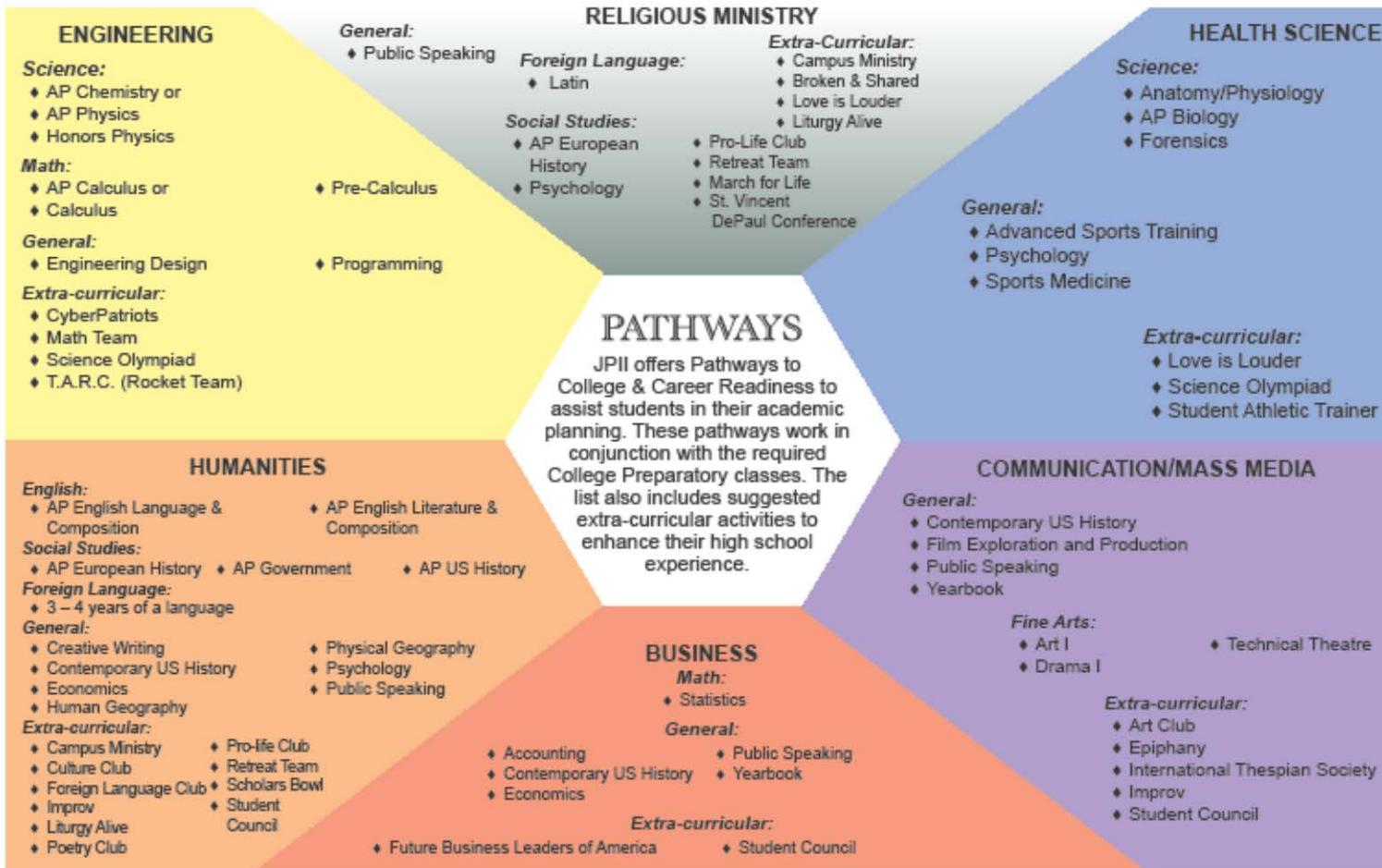
Extra-curricular activities include:

- Campus Ministry, Broken & Shared , Love is Louder, Liturgy Alive, Pro-Life Club, Retreat Team, March for Life, St. Vincent DePaul Conference

St. John Paul II Catholic High School PATHWAYS TO

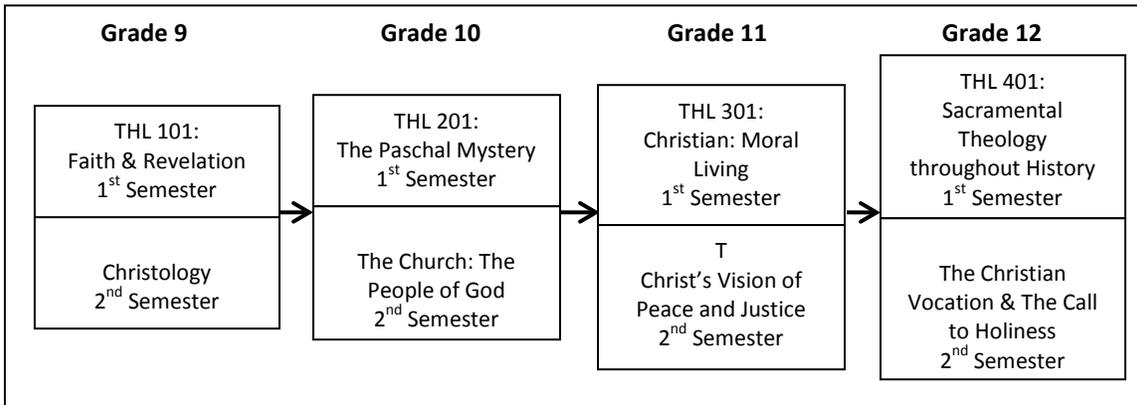
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COLLEGE & CAREER READINESS



Theology

All course listings are guided by Sacred Scripture and Sacred Tradition as presented in the Catechism of the Catholic Church (CCC) following the 2008 publication by the United States Conference of Catholic Bishops: *Doctrinal Elements of a Curriculum Framework for the Development of Catechetical Materials for Young People of High School Age*.



THL 101: Faith and Revelation (USCCB Course I)

The course presents students with an overview of the Roman Catholic faith and Divine Revelation. Students will study the Thomistic proofs of God's existence and learn how to use the Bible and CCC. Students will develop a religious literacy by learning key terminology from Sacred Scripture and Tradition. This course will foster a love for the Scriptures as God's Revelation of God's self to humanity. Through prayer, worship, and reflection, students will develop an appreciation for their unique Catholic identity.

The second part of the course introduces students to the mystery of Jesus Christ, the Living Word of God, and the Second Person of the Blessed Trinity. In this course, students will understand that Jesus Christ is the ultimate Revelation from God to us. In learning about who Jesus is, the students will also learn who Jesus calls them to be. In coming to understand the Incarnation and Christ's Passion, students will come to know the infinite love of God and the dignity of the human person. Students will reflect upon human suffering in light of the Passion of Christ.

1 credit

THL 201: The Paschal Mystery (USCCB Course III)

The course is for students to understand the redemptive process, set forth by God and accomplished in Jesus Christ. Students will discover that Christ's saving mission has been revealed throughout salvation history, from the origins of creation continuing through the Old Testament prophecies. In the New Testament, students will come to know and appreciate the great gift of Jesus' Incarnation, life, death, Resurrection and Ascension. Through reflections on grace, suffering and sacrifice, the implications for the life of the believer will become clear, encouraging students to accept Jesus' call to discipleship.

The second part of the course is for students to learn that the Church was founded by Christ, through the Apostles and continues to be animated and sustained by the Holy Spirit. Students will learn that various images of Church were prefigured and are rooted in Sacred Scripture and have been developed in Tradition. Rather than historical events in the life of the Church, students will come to understand the sacred nature of the Church. Reflecting on the Marks of the Church from the past, the present, and for the future, will assist students to discern the application of those “marks” to the themes of; unity, diversity, culture, universality, ecumenism, holiness, evangelization and the responsibilities of the believer.

1 credit

THL 301: Christian Moral Living

The purpose of this course, in light of Divine Revelation and Catholic moral teaching, is to reflect on the basic moral questions: “What kind of person am I becoming? What kind of person do I want to become?” Through an examination of classical moral virtues, students will understand the importance of character formation. Students will come to know basic moral principles, Catholic moral precepts, and a method for moral decision making. In an atmosphere of respectful inquiry and research, students will apply their knowledge of Catholic morality to contemporary moral issues, enabling students to recognize the “consistent ethic of life” in the moral teachings of the Church. Students will understand that God’s commandments are for human fulfillment and happiness.

The second half of the course introduces students to the body of doctrine known as Catholic Social Teaching (CST). Students will learn the seven major themes of CST, the various types of justice as well as the concepts of peace and charity. Students will apply CST to human society for the purpose of guiding themselves and others in the mission of Jesus in the world. Students will examine the concept of social sin and the social dimension of the Commandments and the Beatitudes. Students will learn how the Scriptures and the Church’s social doctrine enable them to critically examine society according to the criteria of peace and justice, thus preparing them to live as Disciples of Christ.

1 credit

THL 401: Sacramental Theology through History

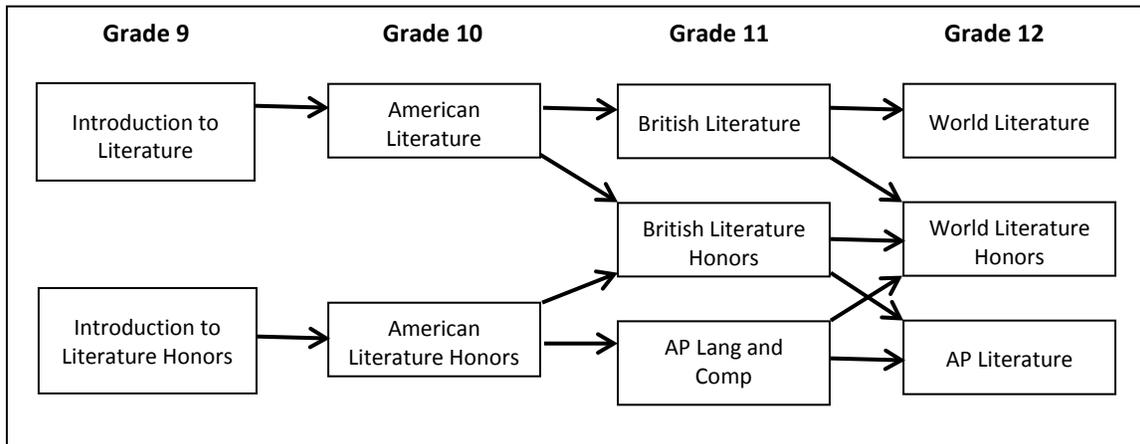
The purpose of this course is to discover the full meaning of each of the seven sacraments, including their roots in Sacred Scripture and historical evolution in the Church. Students will examine the efficacious nature of the sacraments. Students will understand that the Sacraments were initiated by Jesus Christ and with the working of the Holy Spirit, Jesus continues to act through them. Students will learn the Church is the sign and the instrument of the communion of God and God’s people. Grace, healing, sanctification and Christ’s presence and redemption is experienced through the seven Sacraments. In the particular study of each sacrament, students will come to know the Sacraments of Initiation, Healing and Service. As they grow in knowledge, students will come to appreciate the sacraments as sacred encounters with the Risen Christ.

The second half of the course guides students to an understanding of the universal call to holiness: how Jesus Christ calls us to live. Students will study: married life, single life, priestly life, and consecrated life, understanding that each person is called to discern their vocation and how a believer serves God in the world. Students will learn from Sacred Scripture and Tradition the origins and God's plan for humanity. Students will become knowledgeable about the celebrations, effects, challenges, and the joys for each of the vocations. Students will examine the lives of the saints, seeing them as spiritual guides and role models, in order to begin to discern their own personal vocation and their call to holiness.

1 credit

English Language Arts

St. John Paul II Catholic High School requires four credits of English and places a strong emphasis on writing, reading, and critical thinking skills.



Language and Introduction to Literature

Ninth grade students will learn grammar, mechanics, MLA format, vocabulary, and composition usage skills. They will learn to write correct paragraphs, theses, and formal five-paragraph essays. They will practice the four modes of discourse: exposition, narration, description, and persuasion. Students will learn grammar concepts, including punctuation, syntax, and correct sentence formation. They will learn to gather and synthesize research information, and they will write two brief research papers, one per semester. Students will have an opportunity to develop their creative writing skills through poetry, short stories, and other genres. In literature, students will study a variety of literary themes, forms, and genres, including short story, poetry, drama, and novel. Students will read at least one book during the summer and at least one outside reading book each semester.

1 credit

Language and Introduction to Literature Honors

Ninth grade students will come to class expected to have mastered basics in grammar, mechanics, MLA format, vocabulary, and composition usage skills. They will immediately begin writing formal five-paragraph essays with thesis statements because they will have already demonstrated the ability to write well-developed paragraphs with strong topic sentences. They will practice the four modes of discourse: exposition, narration, description, and persuasion. Students will continue to practice grammar concepts, including punctuation, syntax, and correct sentence formation. They will learn to gather and synthesize research information, culminating in a required research paper. Students will have an opportunity to develop their creative writing skills through poetry, short stories, and other genres. In literature, students will study a variety of literary themes, forms, and genres, including short story, poetry, drama, and novel. Students will read at least one book during the summer and one outside reading book each quarter.

Prerequisite: Teacher Recommendation

1 credit

Language and American Literature

Tenth graders will expand their listening, speaking, reading, writing, vocabulary, and grammar skills through writing regular essays and other assignments. The course places more emphasis on formal expository and persuasive writing although students will also learn to identify and develop style and voice through narration and description. Students will follow a standard writing process to create properly cited research papers. Literature will focus on American works from 1650 to 1900. Students will read and respond to at least one book written by an American author during the summer and at least one book written by an American author each semester. This course is tailored for students who need additional practice with concepts and skills required for advancement.

1 credit

Language and American Literature Honors

This course is designed for students who are competent readers and writers and who have adopted habits that will allow them to improve in both areas at an advanced rate. The course covers all of the material described for English 10 but with more focus on the mastery of grammar, composition, vocabulary development, reading comprehension, class participation, and research skills. Honors level students are expected to be both more independent learners and more analytical in their thinking and writing. Students will read and respond to two books written by an American author during the summer and one book written by an American author each quarter. This course is tailored to prepare students for AP level courses in their junior and senior years.

Prerequisite: Teacher Recommendation

1 credit

Language and British Literature

Eleventh grade students continue to expand their listening, speaking, reading, writing, and grammar skills through application. All reading material will be by or about British authors, from Anglo-Saxon England to 1900. In addition to the summer reading novels and the literature in our textbooks, students will read one novel or play by a British author each quarter. Students will continue to develop their grammar, composition, and usage skills through the writing of numerous essays and reports, including narrative, expository, persuasive, and analytical essays. In the spring students write a longer research paper.

1 credit

Language and British Literature Honors

Eleventh grade honors students are confident about their listening, speaking, reading, writing, and grammar skills. The reading material goes to a greater depth in the texts from Anglo-Saxon England to 1900. In addition to the summer reading novels and the literature in our textbooks, students will read one novel or play by a British author each quarter and an additional novel chosen each quarter by the students. Students continue to develop their grammar, composition, and usage skills through the writing of numerous essays and reports, including narrative, expository, persuasive, and analytical essays with a greater emphasis on supporting arguments. In the spring students write a longer research paper.

Prerequisite: Teacher Recommendation

1 credit

AP English Language and Composition

Eleventh grade Advanced Placement students will concentrate on writing essays in various forms (narrative, exploratory, expository, and argumentative) and of increasing complexity in both style and content. These essays will be based on class readings of prose, both fiction and nonfiction, written in a variety of periods and rhetorical contexts. The readings and essay writing will prepare the students for the test in AP English Language and Composition, given in the spring.

Prerequisite: Must have a B+ average in English and Teacher Recommendation

1 credit

Language and World Literature

English 12 students will develop their abilities to understand and respond to works of literature through class discussions, research projects, oral presentations, and the writing of critical essays, including one research paper. Particular emphasis will be placed on revision and research skills and on vocabulary enrichment. The text includes selections from a variety of world cultures, with representative authors such as Homer, Dante, Goethe, and Ibsen. In addition to the textbook selections, students will read one novel or play per quarter.

1 credit

Language and World Literature Honors

Honors English 12 students will read and respond to works of literature from a variety of world cultures, with representative authors such as Homer, Dante, Shakespeare, Goethe, and Ibsen. These readings from the text will be supplemented by outside sources, including essays about literature, historical and biographical information, and selections from the Bible and mythology. In addition, students will read one extra novel or play per quarter. Honors 12 students will regularly write reports and critical essays, as well as the required senior research paper, and will be assigned one oral presentation and one research project per year. Emphasis will be placed on understanding literature in context and developing an in-depth grasp of what is read, with an expectation that independent student work and research will enrich class discussion.

Prerequisite: Teacher Recommendation

1 credit

AP English Literature and Composition

Twelfth grade Advanced Placement English students will develop their abilities to understand and respond to works of literature through class discussions, research projects, and the writing of critical essays, including one research paper. The readings and essay writing will prepare the students for the test in AP Literature and Composition, given in the spring. A score of "4" or higher on this exam will allow students to exempt up to two freshman English classes at many colleges. The course is shaped around four thematically connected units that include novels, plays, short stories, and poetry from a variety of authors, cultures, and time periods. Emphasis will be on in-depth reading and evaluation of literature for the purpose of understanding its literary elements as well as its universal themes. Students will also prepare for the AP exam by taking sample AP tests and writing representative AP essays.

Prerequisite: Must have a B+ average in English and Teacher Recommendation

1 credit

Public Speaking

Students will learn the art of correct speaking, including articulation, pronunciation, projection, gestures, movements, and other requirements for effective speaking. The one semester course is designed for students from grade 9 through grade 12.

0.5 Elective credit

Creative Writing

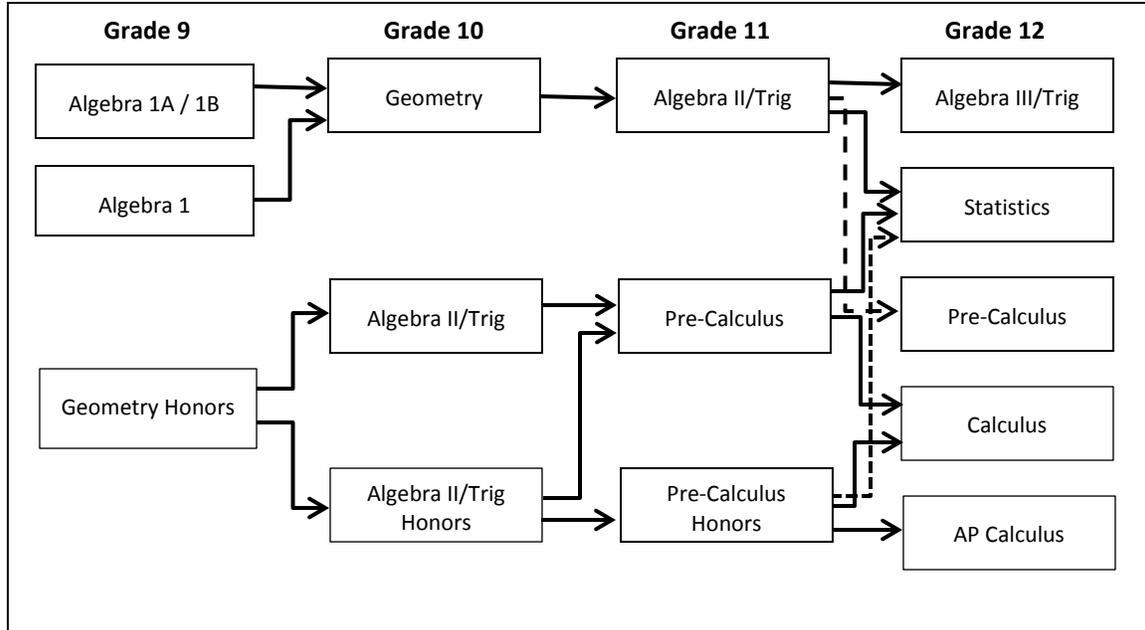
Creative Writing is a workshop class in which students develop their creative writing skills. By focusing on a variety of genres written by published poets, fiction and non-fiction authors, and playwrights, and by continually reading, experimenting, practicing, sharing, responding, and revising, students will develop their craft. In doing so, they will build confidence in their writing while learning how to give constructive feedback to their peers.

Prerequisite: Sincere interest in reading and writing.

0.5 Elective credit

Mathematics

St. John Paul II Catholic High School requires four credits of Mathematics. Students are required to take a math class at the school every year they are enrolled.



Algebra I A and Algebra I B

This course emphasizes review of basic math skills and also introduces and develops the following knowledge areas: operations on numbers and variables; writing and solving equations and inequalities; solving systems of equations and inequalities; operations on polynomial expressions; relations, functions and graphs; variation; irrational numbers; radicals; quadratic equations and factoring; rational equations. This course meets for a full block every day to allow more time for the review of these skills. Algebra I A and B students are not eligible to double-up on math classes during their sophomore year.

Prerequisite: Recommendation of admissions review team and 8th grade math teacher

2 credits

Algebra I

This course introduces and develops the following knowledge areas: operations on numbers and variables; writing and solving equations and inequalities; solving systems of equations and inequalities; operations on polynomial expressions; relations, functions and graphs; variation; irrational numbers; radicals; quadratic equations and factoring; rational equations.

1 credit

Geometry

This course introduces and develops the knowledge of plane and solid geometry: parallel lines and planes; triangles; quadrilaterals and other polygons; circles; area; volume; coordinate geometry; and basic transformations. Deductive reasoning in the form of proofs is applied throughout the course.

Prerequisite: Algebra I

1 credit

Geometry Honors

This course introduces and develops the knowledge of plane and solid geometry: parallel lines and planes; triangles; quadrilaterals and other polygons; circles; area; volume; coordinate geometry; transformations; vectors; and geometric probability. A strong Algebra I background is required. Deductive reasoning in the form of proofs is applied heavily throughout the course.

Prerequisite: Math 8 Honors or Algebra I Honors and Diocesan Algebra I Skills test (for transfer students, students should already be proficient in solving systems of equations and factoring.

1 credit

Algebra II/Trigonometry

This course expands on concepts in Algebra I, adding the following areas: applications of linear equations and inequalities; matrix algebra; complex numbers; graphing and solving linear, quadratic, polynomial, absolute value, radical and rational equations and inequalities; piecewise functions; solving systems of equations; logarithmic and exponential functions; conic sections; and trigonometry.

Prerequisite: Algebra I and Geometry or Geometry Honors

1 credit

Algebra II/Trigonometry Honors

This course is designed for students who have either completed Honors Geometry or who are concurrently taking Honors Geometry. This course expands on concepts in Algebra I, adding the following areas: applications of linear equations and inequalities; matrix algebra; complex numbers; graphing and solving linear, quadratic, polynomial, absolute value, radical and rational equations and inequalities; piecewise functions; solving systems of equations; logarithmic and exponential functions; conic sections; and trigonometry. Students will be expected to apply the skills they have learned to rigorous word problems and real-world simulations throughout the year.

Prerequisites: Algebra I and Geometry Honors (or current enrollment in Geometry Honors)

1 credit

Pre-Calculus

This course is designed to prepare students for college-level Pre-calculus or Calculus. Topics include advanced algebra; analysis; analytic geometry; functions; trigonometry; vectors and parametric equations; polar coordinates; complex numbers; conics; exponential and logarithmic functions; and sequences and series.

Prerequisite: Algebra II/Trigonometry or Algebra II/Trigonometry Honors

1 credit

Pre-Calculus Honors

This course is designed to prepare students to take Calculus or AP Calculus in high school. Topics include advanced algebra; analysis; analytic geometry; functions; trigonometry; vectors and parametric equations; polar coordinates; complex numbers; conics; exponential and logarithmic functions; sequences and series; and basic first- and second-derivatives for polynomial functions.

Prerequisite: Algebra II/Trigonometry Honors

1 credit

Calculus

This course consists of a full high school academic year of work that is comparable to a first semester calculus course in colleges and universities. Topics included are: functions; graphs; limits; continuity; derivatives; and integrals. Topics are approached through a combination of numerical, graphical, and theoretical exercises, and real-world activities.

Prerequisite: Pre-Calculus or Pre-Calculus Honors

1 credit

AP Calculus (A/B)

This course is an Advanced Placement course in calculus and students are required to take the AP Calculus exam at the end of the course. This course consists of a full high school academic year of work that is comparable to a first semester calculus course in colleges and universities. Topics included are: functions; graphs; limits; continuity; derivatives; and integrals. Topics are approached through a combination of numerical, graphical, and theoretical exercises, and real-world activities.

Prerequisite: Pre-Calculus Honors and recommendation of current math teacher

1 credit

Statistics

Students use an activity-based approach to statistics that emphasizes working with data and graphs. Course content includes theory of probability; description of statistical measurements; sampling and experimental design; probability distributions; and statistical inference.

Prerequisite: Algebra II/Trigonometry

1 credit

Algebra III/Trigonometry

This course offers additional instruction in Algebra-based skills and Trigonometry, to prepare students for college-level Pre-Calculus or Discrete Math. Course content includes systems of equations and inequalities; factoring polynomials; graphing and finding roots/solutions of linear, quadratic, polynomial, absolute value, piecewise, rational, logarithmic, square root, and exponential equations; logarithms; and trigonometry.

Prerequisite: Algebra II/Trigonometry and Algebra 1A and 1B

1 credit

Honors Geometry Placement

St. John Paul II Catholic High School recognizes that mastering the basics of mathematics is essential to success. Incoming 9th grade students who meet the following criteria will be placed in Honors Geometry:

- Completed 8th grade Algebra I with a grade no less than a B; and
- Completed 2nd Semester Exam in 8th grade Algebra I with a grade no less than a B.
- Complete the Diocesan Algebra I Skills test. This test will be proctored at the end of the 8th grade year. The test is administered by the JPII Math Department. The Admissions office will communicate the time and place for testing.

For Incoming 9th grade students that do not meet this 8th Grade Algebra I criteria the following option is available to be placed in Honors Geometry:

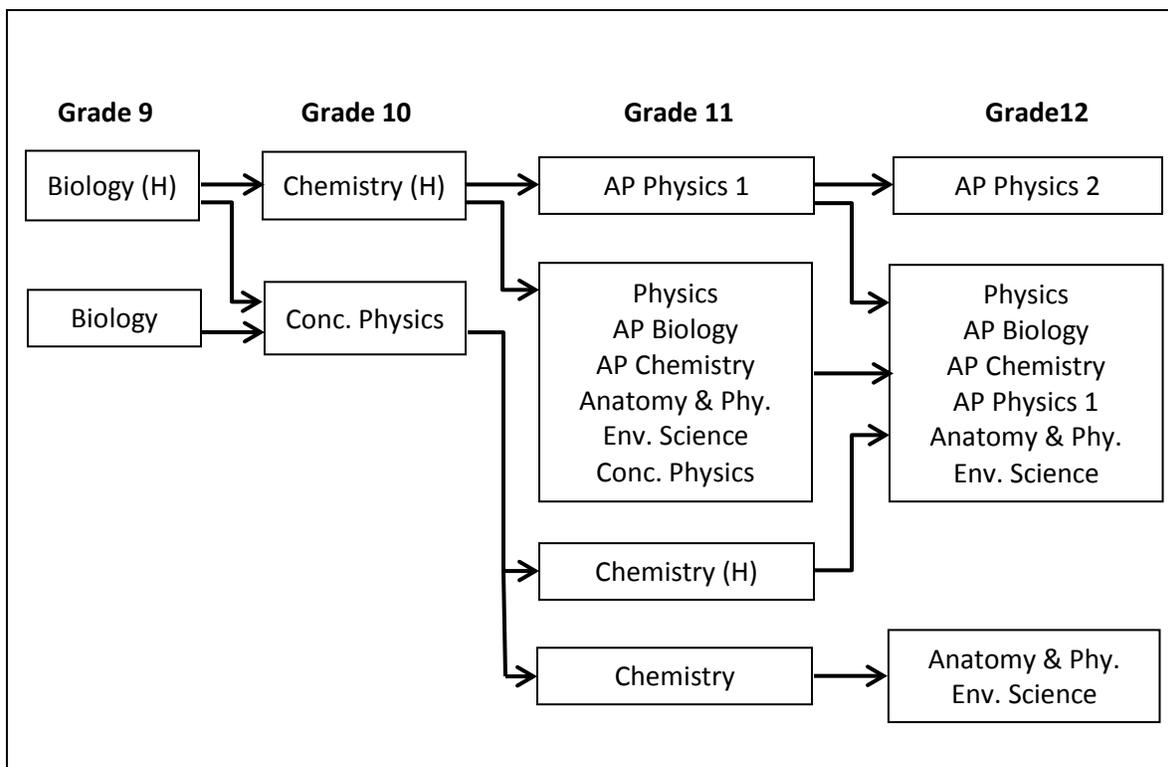
- Complete the Diocesan Algebra I Skills test with a grade no less than 80%. This test will be proctored at the end of the 8th grade year. The test is administered and graded by the JPPII Math Department. The Admissions office will communicate the time and place for testing.

For Incoming 9th students that do not meet any of the criteria for Honors Geometry the following option exists for the 10th grade year:

- Students can take both Honors Geometry and Honors Algebra II as sophomores provided a 90% test average is maintained in Algebra I all four quarters and are given permission from the head of the Math Department.

Science

St. John Paul II Catholic High School provides full laboratory facilities. Most courses (excluding AP and senior-level courses) require a science fair project, and a related project paper. A school-wide science fair is held every February. The department also sponsors Science Olympiad and Team America Rocketry Challenge teams that compete locally, regionally and nationally.



Biology

This course is a laboratory course that presents a basic but thorough introduction to biological science. Topics include biochemistry, cell biology, genetics, evolution, and the diversity of life. Major activities include fetal pig dissection and microscopy explorations. All ninth grade students take this course.

1 credit

Biology Honors

This course is a laboratory course that presents a basic but thorough introduction to biological science. Topics include biochemistry, cell biology, genetics, evolution, and the diversity of life. Major activities include fetal pig dissection and microscopy explorations. All ninth grade students take this course.

Prerequisites: Algebra 1

1 credit

Chemistry

This course is designed to establish a fundamental understanding of chemistry and its importance to everyday life. Emphasis is on vocabulary and the application of principal formulas and laws through labs and hands-on activities. Topics include the history of chemistry, atomic structure, periodic laws and trends, chemical bonding and reactions, basic stoichiometry, solutions, gas laws, and rudimentary organic nomenclature.

Prerequisites: Biology, Conceptual Physics, Algebra II/Trig (or current enrollment) and current science teacher and guidance department recommendation

1 credit

Chemistry Honors

This course is a lab-oriented course that offers students a basic but thorough introduction to chemistry. Topics include scientific measurement, problem solving, atomic structure, the periodic table, chemical reactions, stoichiometry, behavior of liquids and gases, titrations, redox reactions, and introductory thermodynamics.

Prerequisites: Biology Honors, Algebra II/Trig Honors, Algebra II/Trig (or current enrollment)

1 credit

Conceptual Physics

This course is designed to give students a basic understanding of the physical world while focusing more on physical concepts and real-life applications rather than problem solving. Concepts are reinforced via a plethora of demonstrations, hands-on activities, and laboratory sessions. Topics include kinematics, linear mechanics, heat, optics, and waves and sound.

Prerequisites: Biology or Biology Honors and Sophomore or Junior standing

1 credit

Physics

This course is designed to give students a basic understanding of the physical world as well as to enable students to learn problem-solving skills in both word problems and in laboratory sessions. Concepts are reinforced via a plethora of demonstrations, hands-on activities, and laboratory sessions. Topics include Fundamentals of Kinematics in one and two dimensions; Fundamentals of Linear Mechanics; Fundamentals of Work, Energy, and Power; Fundamentals of Thermal Physics and Fluid Mechanics; and Fundamentals of Electrostatics and Electric Circuits.

Prerequisites: Chemistry Honors, Algebra II/Trig Honors or Algebra II Trig

1 credit

AP Physics 1

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits as outlined by the AP College Board. This course requires that 25 percent of the instruction time be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. This is a two period course that will meet daily, one class period on each A and B day. Laboratories will be performed weekly to satisfy the 25 percent minimum classroom requirement. Both instructor-led and inquiry-based (student-led) laboratories will be conducted throughout the year. Lectures will be balanced with recitation for in-depth homework solutions and discussions. Completion of the AP Physics 1 exam is required.

Prerequisites: Chemistry Honors, Pre-Calculus Honors (or current enrollment) and current science and math teachers recommendations

2 credits

AP Physics 2

AP Physics 2 is an algebra-based, introductory college-level physics course that explores topics such as Electrostatics, Electric circuits, Magnetic fields, Electro-Magnetism, Fluid Mechanics and Thermal Physics; Wave motion and Optics; and Nuclear and Atomic Physics as outlined by College Board. This course requires that 25 percent of the instruction time be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. This is a two period course that will meet daily, one class period on each A and B day. Laboratories will be performed weekly to satisfy the 25 percent minimum classroom requirement. Both instructor-led and inquiry-based (student-led) laboratories will be conducted throughout the year. Lectures will be balanced with recitation for in-depth homework solutions and discussions. Completion of the AP Physics 2 exam is required.

Prerequisites: AP Physics 1 and AP Calculus or Calculus (or current enrollment) and current science and math teachers recommendations

2 credits

Human Anatomy and Physiology Honors

This course gives students with an interest in health-related topics and careers an opportunity to study in-depth the structure and functions of the major human body systems. The major body systems explored include the integumentary, skeletal, muscular, nervous, cardiovascular, respiratory, digestive, and urinary systems.

Prerequisite: Biology Honors or Biology, Chemistry Honors or Chemistry with teacher recommendation

1 credit

Environmental Science

This course gives students a fundamental understanding of environmental science and its importance to everyday life. This course involves the study of the interrelationships of organisms with their environment, promotes awareness and an appreciation for the environment, and promotes an understanding of the factors that affect the environment.

Prerequisites: Biology Honors or Biology, Chemistry Honors or Chemistry

1 credit

Forensic Science I

This first semester elective course is designed to introduce students to the science encountered in law enforcement through a variety of hands-on experiments. It will incorporate principles from chemistry, biology, and physics. Students will look at qualitative data as well as quantitative data and apply critical thinking skills to solve problems.

Prerequisites: Chemistry Honors (B average or above)

0.5 Elective credit

Forensic Science II

This second semester elective course is designed for students to continue to explore topics in forensic science. These topics include document analysis, entomology, additional studies into Human remains and DNA, tool marks, and blood pattern analysis.

Prerequisites: Forensic Science I

0.5 Elective credit

AP Biology

This two-period course is a college-level biology course, with a comprehensive emphasis on biochemical processes and the study of all living things in preparation for the AP exam. AP Biology includes an advanced laboratory program in which most of the College Board-designated AP labs are completed. Topics include biochemistry, cell biology, genetics, evolution, botany, ecology, and animal form and function. The second period is utilized for laboratory experiences, regular coursework, and independent study halls.

Prerequisites: Biology Honors, Chemistry Honors and current science teacher approval

1.5 credits

AP Chemistry

This two-period course is a college-level chemistry course designed to enable students to attain a depth of understanding of the fundamentals of chemistry. AP Chemistry includes a comprehensive set of laboratory experiences. Topics include structure of matter, states of matter, nuclear chemistry, reaction types, stoichiometry, chemical equilibrium, kinetics, and thermodynamics. The second period is utilized for both laboratory experiences and further instruction.

Prerequisites: Chemistry Honors and current science teacher approval

2 credits

Chemistry Lab Assistant

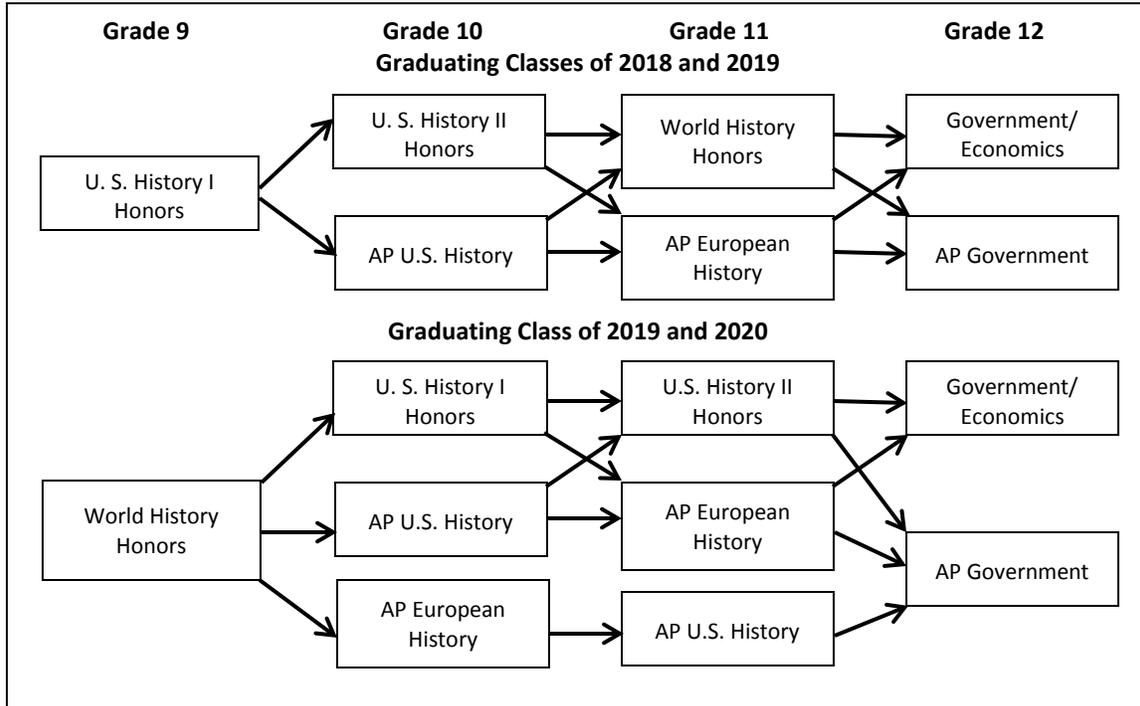
This year long position involves helping the AP Chemistry instructor prepare for and clean up after AP Chemistry and Chemistry I Honors labs, as well as manage chemical inventories. A lot of experience will be gained in preparing chemical solutions, proper safe chemical handling, and a variety of tasks associated with managing a chemistry lab.

Prerequisites: AP Chemistry and AP Chemistry teacher approval

0.5 Elective credit

Social Sciences

St. John Paul II Catholic High School requires four credits of Social Studies. The course of study emphasizes the understanding of ideas and values that lay the foundation for responsible citizenship, while fostering the development of analytical and critical thinking through the study of history, geography, economics, and political science.



U.S. History I Honors

This course engages students in the study of United States history from the Colonial era to Reconstruction. Students will have opportunities to survey and investigate significant events and ideas in the development of the United States, as well as explore its role in world affairs, while sharpening analytical, critical thinking, and research skills.

1 credit

U.S. History II Honors

This course engages students in the study of United States history from Reconstruction to the present day. Students will have opportunities to survey and investigate significant events and ideas in the development of the United States, as well as explore its role in world affairs, while sharpening analytical, critical thinking, and research skills.

Prerequisite: U.S. History I Honors or Preparative Accelerated U.S. History

1 credit

AP United States History

This college-level course, taken primarily by tenth grade students, examines the evolution of the political, economic, diplomatic, social, and cultural history of the United States from the Colonial era to the present day. This course engages students in the comprehensive study of critical issues and events of American history. Students will engage in college-level assignments which focus on analytical and evaluative writing, historical research, Document-Based Questions, comparative analysis, thematic categorization, and primary and secondary source synthesis. This course is designed for students who want to benefit from positive peer interactions in a topic of similar interest. This college course is equivalent to two three-hour United States History courses. Only students who score well on the AP Exam in May and choose a university which accepts AP credit can receive college credit for this course.

Prerequisite: U.S. History I

1 credit

World History Honors

This course introduces students to the study of world history since the mid-14th century. Students will explore topics including the European Renaissance, Chinese Dynasties, Industrialization, Imperialism, World Wars, post-colonialism, and globalization. Students will have opportunities to survey and investigate significant events and ideas which contributed to our modern world, as well as sharpening analytical, critical thinking, and research skills.

Prerequisite: U.S. History II Honors or AP United States History

1 credit

AP European History

This college-level course, taken primarily by eleventh grade students, engages students in an in-depth study of key events in European history from the Renaissance to the present. It offers a comprehensive overview of the development of European culture, while also introducing students to the concerns, resources, and methodologies of historical studies. Students will engage in college-level assignments which focus on analytical and evaluative writing, historical research, Document-Based Questions, comparative analysis, thematic categorization, and primary and secondary source synthesis. This course is designed for students who want to benefit from positive peer interactions in a topic of similar interest. This college course is equivalent to a three-hour college Western Civilization course. Only students who score well on the AP Exam in May and choose a university which accepts AP credit can receive college credit for this course.

Prerequisite: US History 1

1 credit

Government

This one semester civics course for twelfth grade students gives a broad overview of the policies and institutions of the United States government. While becoming knowledgeable about the foundations, the structures, and the theories underpinning the United States' system of government, students will also gain an understanding of how a democratic republic functions, including their own role as active and informed citizens.

Prerequisite: World History Honors or AP European History

0.5 credit

Economics

This one semester social science course for twelfth grade students provides students with an introduction to the basic characteristics of the American economic system. It covers the economic principles that influence business decisions and the role of government and individuals in the economy. The curriculum incorporates the study of healthy personal finance practices.

Prerequisite: World History Honors or AP European History

0.5 credit

AP Government and Politics

This college-level political science course, taken primarily by twelfth grade students, is a yearlong course of study. Students gain an introduction to the discipline of political science while also acquiring an in-depth understanding of the American system of government, from its foundations to the present day. This course is designed for students who want to benefit from positive peer interactions in a topic of similar interest. This college course is equivalent to a three-hour college Political Science course. Only students who score well on the AP Exam in May and choose a university which accepts AP credit can receive college credit for this course.

Prerequisite: AP European History or World History Honors

1 credit

Contemporary World Issues

Students analyze governments, economies, peoples, and cultures from around the world in this course. Instruction emphasizes the structures and policies of the United States and how they compare to other systems in the international community. Students apply critical thinking and research skills to examine current events and contemporary issues facing the United States and the world.

Prerequisite: Seniors Only

0.5 Elective credit

Psychology

This year-long social science course presents an overview of the science of the mind. Students will engage in activities focusing on personality theories and developmental psychology. Students will also explore topics such as personality disorders and treatment.

Prerequisite: Juniors and Seniors Only

1 Elective credit

Geography I

This one semester social science course engages students in the study of the physical environment and human population of our planet Earth. Students will participate in multiple activities to learn about the 195 countries in our world. Students will also have opportunities to locate landforms, nations, and cities using latitude and longitude, study Earth's biomes and climates and their impact on the human population, discuss the impact of typical and extreme weather patterns on both the environment and humans, and analyze the causes and effects of deforestation, salinization, agriculture, and other environmentally altering human actions. Students will use a framework of Church Doctrines and Biblical teachings to discuss God's calling for humans to be good stewards of the Earth. Additionally, throughout the semester, students will research the Earth's physical environment both historically and currently.

Prerequisite: Juniors and Seniors Only

0.5 Elective credit

Geography II

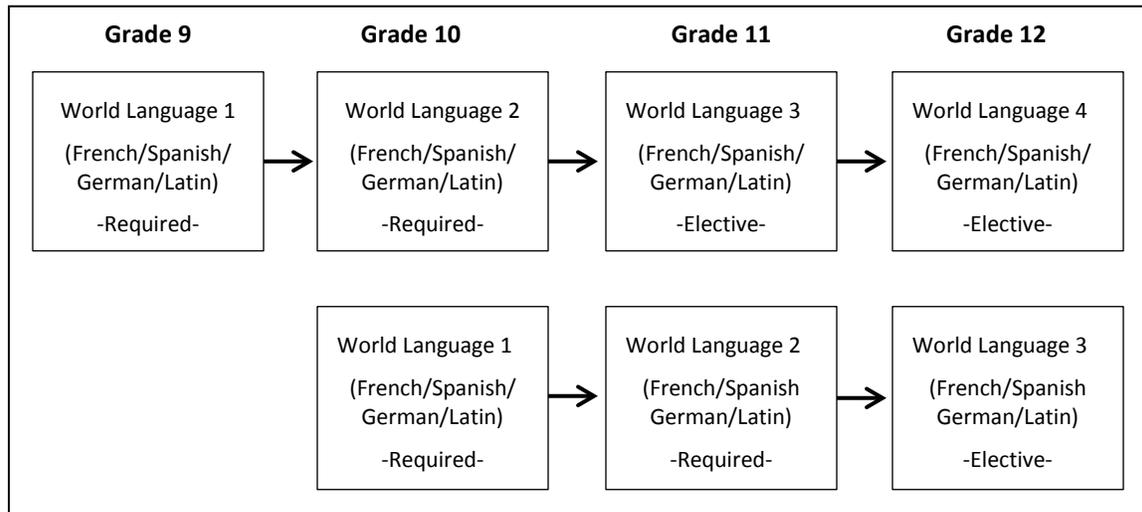
This one semester social science course engages students in the study of the physical environment and human population of our planet Earth. Students will have opportunities to explain patterns of diversity in our world's cultures, identify the positive and negative consequences of human activities in altering the planet's landscape, describe methods of protecting and preserving Earth's natural resources, and research and analyze the patterns of migration and interaction of our human population. Students will use a framework of Church Doctrines and Biblical teachings to discuss God's calling for humans to be good neighbors.

Prerequisite: Juniors and Seniors Only

0.5 Elective credit

World Languages

St. John Paul II Catholic High School offers four languages: French, Spanish, German and Latin. Latin will place emphasis on primary source translation instead of conversational skills. Additional language classes may be available through our Dual Enrollment program with UAH.



Level One

The language is introduced through a proficiency-based program that helps the student to develop the skills of listening, speaking, reading, and writing. Cultural themes and basic conversational patterns are taught.

1 credit

Level Two

Material from the first level is reviewed and a more detailed study of vocabulary and grammar is included. More complex structures of the language along with the intermediate conversational skills are presented and cultural themes of the first level are expanded.

Prerequisite: Level One or Passed Proficiency Test

1 credit

Level Three

More advanced conversational skills are emphasized. The finer points of grammar are given due attention. Translation skills are developed. Significant historical figures, authors and the literature of the target language are studied.

Prerequisite: Level Two

1 credit

Level Four

Continuance of skills emphasized in level three with emphasis on history, music, art, literature and refinement of grammatical structures.

Prerequisite: Level Three

1 credit

Spanish I Placement

Some of our incoming 9th graders have a strong background in Spanish and would like to begin their studies in level II of the language. Students may take a Spanish I proficiency test which covers the material taught in Spanish I course. A student that successfully completes the Spanish I test may begin with Spanish II and will then take Spanish III in the 10th grade.

Please note: This test directly correlates to requirements in the Alabama course of study for Spanish I. Portions of this test are not part of or required to be a part of any middle school curriculum.

Fine Arts

St. John Paul II Catholic High School offers fine Arts Courses in the Visual Arts and in the Performing Arts.

Visual Arts

St John Paul II Catholic High School offers a four-year curriculum in visual art (Art I – Art IV). Student art at all four levels is exhibited locally and regionally in competitions and shows. Assignments build sequentially in technical difficulty and in complexity. Therefore, students must have Art I (or its equivalent) before taking Art II, etc. If transferring from another high school, students are encouraged to bring examples of their previous artwork for proper placement.

Art I Fundamentals of Drawing and Design

Students explore a wide variety of traditional media, building skills and enlarging their acquaintance with art elements (e.g., line, shape, value) and the principles of good design. Accurate observation is emphasized. Both two- and three-dimensional work is produced, including gesture and contour drawing, white charcoal, glue line relief, collage, papier-mâché, watercolor, and colored pencil.

1 credit

Art II Art History and Modern Masters

Experience in drawing, painting, printmaking, and sculpture is expanded and further developed. Additional media are introduced including black charcoal, clay modeling, linoleum and woodblock printmaking. Career-minded students begin preparing work for inclusion in a portfolio.

Prerequisite: Art I

1 credit

Art III Advanced Media and Portfolio Development

Students research the wide range of career opportunities in art. Added media include, advanced painting, advanced printmaking, and color and gray-scale soft pastels. Students planning to major in art in college assemble portfolios of their best work and are invited to attend National Portfolio Day sponsored by NACAD (National Association of Colleges of Art and Design) in the fall.

Prerequisite: Approval of Instructor

1 credit

Art IV Advanced Drawing, Painting and Art History

Art students continue to develop drawing skills, with emphasis on life drawing and the human figure. They work on advanced assignments in oil painting and printmaking. They plan and supervise production of an annual "Senior Project." Students with specific art interests are allowed to incorporate selected independent studies into their assignments for the year.

Prerequisite: Approval of Instructor

1 credit

Performing Arts

Concert Choir

Vocal music class provides training in proper vocal technique and studies in music theory and sight-reading. The ensemble performs at three major concerts: the Sacred Arts concert, Christmas concert and the Spring concert. The group also performs at such events as school liturgies, masses at local parishes, and concerts at area schools. In addition, students have many optional opportunities to perform including the Alabama All-State Chorus, Honor Choir, and Solo/Ensemble contest.

1 credit

Intro to Drama

This course offers study in many aspects of “the theatre,” including theatre designs, theatre history, improvisation, stagecraft, stage lighting, theatrical makeup, scene design, props, and costumes. Students also study the body and voice and develop the skills necessary to perform before an audience. Students have the opportunity to perform in the community and at school functions.

1 credit

Play Production

This course will provide the student with practical experience in the production of a dramatic presentation with assignments in acting and stage management. It will also include the study of style/movement, and the study of voice for the performer. The class will rehearse and perform a play and a musical.

Prerequisite: Intro to Drama

1 credit

Film Exploration and Production

In this film appreciation course, students will learn the vocabulary of film cinematography, movement, sound, writing, and acting, and will analyze these elements in representative films. The course will also include a unit on film history. In the final quarter, students will demonstrate what they have learned through special projects, culminating in the creation and production of their own short films.

Prerequisite: Sophomores, juniors and seniors only

1 Elective credit

Technical Theater

This course will provide the student with practical experience in the design and production of a dramatic presentation with assignments in scenery, lighting, properties, sound, costumes, make – up, publicity, and other aspects of theatre production. The class may be taken more than once and may be taken for one semester or as a yearlong course. There is possibility of some out of class work such as set building days or working backstage during the run of the production.

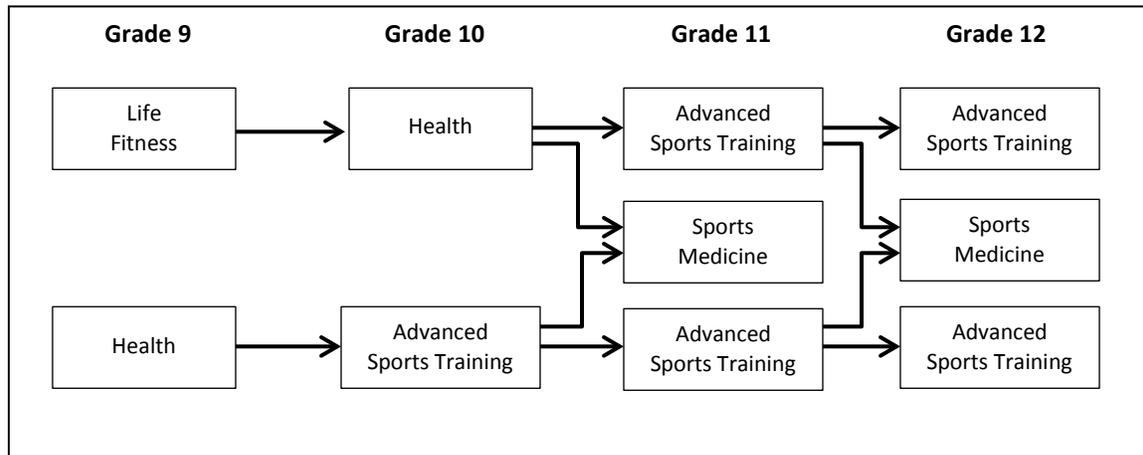
1 credit

JPII Band

The JPII band is made up of the concert band, marching band and pep band. The marching band performs for all home and selected away football games, as well as the Veterans Day parade in Huntsville. The pep band plays for all pep rallies and some off campus events such as nursing homes. The concert band is the flagship of the band program. The concert band performs for the Sacred Arts concert, Veterans Day program, Christmas Concert, Music Performance Assessment, Spring Concert and Graduation. All of the above events require mandatory attendance. There is usually Band Camp the last week of July which is also mandatory. The band also takes a trip usually every other year. We have been to New York, New Orleans, Atlanta and Orlando.

1 credit

Physical Education and Health



Life Fitness

This is a required course that provides a general introduction to physical education. Students will study the development of physical education from the beginning of time to the present day. They will also study and participate in individual and team sports with the end result being the development of a lifelong fitness plan.

1 credit

Advanced Sports Training

This semester course will consist of a 20 week Fall and Spring weight lifting and conditioning cycle. This program will aid the student in enhancing their cardiorespiratory endurance, flexibility and muscular strength by changing the types of lifts and cardiorespiratory exercises performed every 20 weeks.

Prerequisite: Life Fitness/Health

0.5 Elective credit

Health

This is a required course which is only one semester in length. The students will learn the five dimensions of wellness and how they relate to each other. They will evaluate their own health knowledge and behavior and develop strategies for reducing risk factors.

0.5 credit

Sports Medicine

The Sports Medicine class would be beneficial to anyone who would be considering a career in the medical field. This course will cover administration and development aspects of an athletic trainer, anatomy and physiology, prevention and treatment of injuries, as well as the rehabilitation of injuries. There is a hands-on section involving in class and out of class experiences. The class is a yearlong elective class.

1 Elective credit

Computer and Business Technology

St. John Paul II Catholic School requires two Computer and Business Technology courses for graduation: Career Preparedness A and Career Preparedness B. Computer Science and Engineering elective courses include: Programming, AP Computer Science A and Engineering Design. Elective courses for Business include: Accounting, Yearbook and Library Aide.

Career Preparedness A

This course will cover personal decision making, academic planning, career development, and personal skills assessment. It will also cover basic and advanced technology concepts including diagnosing problems, file manipulation, operating systems, emerging technologies, digital citizenship, collaborative learning, and ethics.

0.5 credit

Career Preparedness B

This course will cover academic planning, career development, postsecondary admission processes, and employment process. It will also cover personal finance concepts including budgeting, saving/investing, banking, credit/debit, and insurance.

Prerequisite: Career Preparedness A

0.5 credit

Programming

Programming will use Java to introduce students to basic concepts of programming. This course will focus on an object-oriented approach to problem solving. It includes the study of common algorithms and uses of some of Java's built in classes and interfaces for basic data structures.

Prerequisite: Career Preparedness A and Geometry with a final grade of B or higher

1 Elective credit

AP Computer Science A

AP Computer Science A will use Java to introduce students to basic concepts of programming. This course will focus on an object-oriented approach to problem solving. It includes the study of common algorithms and uses of some of Java's built in classes and interfaces for basic data structures. AP students will be given extra study materials and a study session to prepare them to take the AP Computer Science A exam in the spring.

Prerequisite: Career Preparedness A and Geometry with a final grade of B or higher

1 Elective credit

Engineering Design

Engineering Design is a pre-engineering, pre-architecture, and cross-discipline program. The curriculum introduces students to different engineering disciplines and helps students practice the fundamentals of the engineering design process. The curriculum introduces students to the Solid Edge software tools that engage students in real-life projects that help them develop STEM (Science, Technology, Engineering, and Mathematics) skills.

Prerequisites: Career Preparedness A, Geometry

0.5 Elective credit

Library Aide

The JPII Library Aide program allows students to experience and practice many of the skills necessary in operating a library. Participation in this program also fosters a commitment of service to students and faculty, and encourages student leadership.

Prerequisite: Juniors and seniors only

0.5 Elective credit

Yearbook/Journalism

Students learn to deal with budgets and deadlines while choosing and implementing a theme for the year's publication of the yearbook. Students are expected to take photographs for the publication. Journalistic writing is emphasized including headlines, reporting techniques, angle, quotes and writing style. Students will also learn different aspects of advertising and marketing.

Prerequisite: Sophomores, juniors and seniors only

1 Elective credit