



Notre Dame High School
Course Descriptions

English Department

English I

This course emphasizes reading and writing skills through study of four genres: drama, short story, poetry and novel. In addition to intensified grammar and vocabulary review, there's an emphasis on speaking, listening and note-taking skills. Students also practice test taking strategies in preparation for PSAT and/or the PLAN.

Honors English I

This course emphasizes reading and writing skills through study of four genres: drama, short story, poetry, and novel. Students learn to analyze the various genres on the figurative level through their knowledge of literary devices. Regular vocabulary exercises are integrated into the process approach to writing. This course introduces seminar style discussions based on long-range assignment. Students read and write at a faster pace and will be asked to make presentations.

English II

This course emphasizes reading, writing and analysis skills through the study of World literature. Students will trace themes and compare and contrast styles and techniques using bibliographical, historical and geographical influences on the form and content of the works. Regular grammar and vocabulary exercises are incorporated into the process approach to writing. Students practice test taking strategies in preparation for the PSAT and/or the PLAN.

Honors English II

This course emphasizes reading, writing and analysis skills through the study of World literature. Close textural analyses as well as research papers using bibliographical, historical and geographical influences on the form and content of the text are expected. Weekly grammar and vocabulary exercises are incorporated into the process approach to writing. The course utilizes the seminar style discussion begun in Honors English I based on long-range assignments and incidental outside readings, reports on plays, concerts and poetry readings attended. Students read and write at a faster pace and will be asked to make presentations.

English III

This course concentrates on the practice of reading and writing skills through the study of literature. It includes extra practice in process writing, weekly incorporations of grammar vocabulary exercises into writing assignments, and practice and test taking strategies in preparation for the PSAT, SAT and/or the ACT.

Honors English III

This course emphasizes reading, writing and analysis skills through the study of American literature. Close textual analysis as well as research papers using bibliographical, historical and geographical influences on the form and content of the text are expected. Regular grammar and vocabulary exercises are incorporated into the process approach to writing. This course continues to utilize seminar style discussion based on long range assignments and incidental outside readings, reports on plays, concerts, and poetry readings attended. Honor students read and write at a faster pace and will be asked to make presentations.

AP English Language and Composition

This course prepares junior students to a variety of critical course methodologies and practicing writing the kinds of essays which appear on the College Board advanced placement exam given in the spring of their junior year. Using a college American literature text and a college-level rhetoric book, students read and analyzes works from the American and other literary traditions. In addition to practicing the three types of essays, students write a long researched essay. This course utilizes a seminar style of method discussion. Students who take this course must be self-motivated and capable of independent work.

English IV

This course includes the reading analyses of British literature, extra practice and process writing, and practice in verbal skills and test taking strategies in preparation for the SAT and/or ACT. In addition to the research and writing of a term paper, students write a number of essays and keep a journal.

AP English Literature and Composition

This course includes the reading and analysis of World literature, the continued study of various modern analytical mythologies, and practicing writing the kinds of essays that appear on the College Board advanced placement exam given in the spring. In addition to completing a long research paper, students will write a number of analyses each nine weeks. This course continues to utilize a similar style method of discussion. Students who take this course should be highly self-motivated and capable of working independently. Students must take the AP exam given in the spring.

Public Speaking

Students will study the elements of effectively building and delivering a variety of speech styles. Students will also practice active listening and feedback from their peers while preparing to present speeches to diverse audiences. Among the types of speeches addressed are persuasive, introductory, informative and impromptu speeches. Public Speaking is a one semester class.

Fine Arts Department

Band and Percussion

Students will study/rehearse/perform music of varying levels of difficulty and styles representing the classical to contemporary periods in music history. Lessons in music history, theory, and listening will be incorporated into the daily rehearsals. Through the rehearsal/performance process, students will improve their musicianship and technical facility on their instruments. All students should recognize and develop the individual responsibilities and self-discipline that are essential to the development and growth of the organization.

Beginning Guitar

Students will study, rehearse and perform music from a variety of beginning classical guitar texts and instructor generated materials. Instruction in note reading and chord techniques will be included. Lessons in music history, theory and listening will also be part of the instruction. Students will practice and perform individually and in ensemble. Nylon string classical guitar is preferred. Steel string acoustic guitar is acceptable.

Beginning Piano

Students will study, rehearse and perform piano music from a variety of beginning texts and instructor generated materials. Instruction in note reading and chord techniques will be included. Lessons in music history, theory and listening will also be part of the instruction. Students will practice and perform individually. Students must have access to a piano or keyboard at home for practice.

Jazz Band

Students will study/rehearse/perform music of varying levels of difficulty and styles representing the classical to contemporary periods in jazz. Lessons in music history, theory, and listening will be incorporated into the daily rehearsals. Through the rehearsal/performance process, students will improve their musicianship and technical facility on their instruments.

Dance 1

This course has a concentration on movement fundamentals through the dance elements of time, space and energy. The intent is to give students an awareness and reverence for the physical body and its athletic and expressive capabilities. Students experience these elements through a variety of genres (modern dance, swing dance, hip hop, ballet, African and others). Introductory elements of dance choreography and performance are also included.

Theatre 1

Theatre 1 covers many aspects of theatre. You will study acting theory and improve your acting skills, using improvisation as well as memorized, prepared scenes. You will also study theatre history, technical theatre, and some musical theatre, film, and television. You will also learn how to be an appropriate audience, and critique other's performances and productions.

Advanced Theater

Advanced theater will continue to focus on various aspects of the three main areas of theater: performance, theater history and technical theater. Students will spend time performing, reading, analyzing and producing theater in the classroom and will participate in one children's theater production which will tour to local elementary schools.

Intro to Art

This course is a survey of art-making for all skill and experience levels. Students will try out various media including painting, drawing, sculpture, and more as they learn the basic elements and principles of art and make connections to famous artists and art from history. Topics include:

- the elements of art including line, shape, value, texture, pattern, space, form,
- color media including pencil, ink, watercolor, oil pastel, colored pencil, charcoal, acrylic, and ceramic
- connections to art history, contemporary culture, and Biblical perspective

2D Art:

This course studies of the principles of design through a range of media, including drawing, painting, mixed media, and collage. Subjects will include still life, landscape, portraiture, and abstraction. Topics include:

- the principles of art including balance, contrast, emphasis, rhythm, movement, and unity
- media including pencil, ink, watercolor, oil pastel, colored pencil, charcoal, acrylic
- connections to art history, contemporary culture, and Biblical perspective

AP Art:

This is a college-level AP credit course devoted to developing students' individual style and an intentional, cohesive body of artwork. Topics include:

- mastery of a focused selection of technical skills
- guided development of personal style
- development of an in-depth body of original work

Photography:

This course explores both traditional 35mm film and digital photography techniques. Students will learn the entire process of image-making start to finish, from taking pictures to developing film to making prints. Topics include:

- application of the elements and principles of art
- creating images through pinhole, 35mm, & digital methods
- seeing images in the context of art history, contemporary culture, and Biblical perspective
- exploration of the psychology and ethics of image-making

Ceramics

This course is a hands-on practicum in ceramic media for those willing to get their hands dirty. Techniques covered will include hand-building construction, wheel-throwing, and sculpture. Topics include:

- exploration of ceramics and related 3D media using a variety of techniques
- creative design and craftsmanship
- connections to art history, contemporary culture, and Biblical perspective

Foreign Language Department

French 1

The course is an introduction to French. Students learn elements of French grammar and basic vocabulary for simple communication. Oral and written communication, reading and listening comprehension are addressed. Curriculum themes include a student's daily life, family, school, and leisure activities. Curriculum focuses on regular verbs and a few irregular verbs in the present tense. Prerequisite: none.

French 2

The course is a continuation of the skills and material taught in French I. Students will work to improve their ability to speak in French and to understand spoken French. Reading and writing assignments will increase in length and difficulty through the year. Curriculum themes include celebrations, shopping, travel, household, and foods and dining. Curriculum focuses on most irregular verbs, and the use of two past tenses.

Prerequisite: French 1.

French 2-Honors

The course is a continuation of the skills and material taught in French I. Students will work to improve their ability to speak in French and to understand spoken French. Reading and writing assignments will increase in length and difficulty through the year. Curriculum themes include celebrations, shopping, travel, household, and foods and dining. Curriculum focuses on most irregular verbs, and the use of two past tenses. The Honors-level course instruction will be delivered substantially in French, and will be geared to elicit higher order thinking skills in students. Prerequisite: French 1.

French 3

The course is a continuation of the skills and material taught in French 2. Students will work to improve their ability to speak in French and to understand spoken French. They will read increasingly difficult texts and write compositions. Curriculum themes include health, modern life, work and technology. Curriculum focuses on a variety of verbs in the present, past, imperfect, pluperfect, future, and conditional forms, as well the subjunctive mood. Prerequisite: French 2.

French 3-Honors

The course is a continuation of the skills and material taught in French 2. Students will work to improve their ability to speak in French and to understand spoken French. They will read increasingly difficult texts and write compositions. Instruction and class discussions will take place primarily in French. Instruction will be geared to elicit higher

order thinking skills in students, and students are expected to fully participate in the work of the classroom. Curriculum themes include health, modern life, work and technology. Curriculum focuses on a variety of verbs in the present, past, imperfect, pluperfect, future, and conditional forms, as well the subjunctive mood. Prerequisite: French 2.

Honors French 4

This elective course has four main goals:

- Maintain and improve students' knowledge of vocabulary and verbs from previous years
- Improve students' confidence and fluency in speaking French
- Improve students' writing skills in French
- Study and enjoy works of literature and film

Instruction and class discussions will take place primarily in French, and students are expected to participate in the work of the classroom. Prerequisite: French 3.

German 1

The first year German language course will be an introduction to the language and cultures of German speaking countries. You will be learning to express yourself in German on a variety of topics including greetings, introductions, counting, spelling, going to school, going to the movies, family, shopping, telling time, talking about months, seasons, the weather, and celebrating a birthday etc. Grammar points you will encounter include the present tense forms of verbs, the future tense, modal auxiliaries, question formation, word order, the Nominative and Accusative cases, definite and indefinite articles among others.

German 2

The second year German language course will be an expansion on vocabulary and grammar learned in the first year. You will continue to learn to express yourself in German on a variety of topics including: clothing items, birthdays, house/furniture, fun and work, sports, traveling, etc. Grammar points encountered include wissen/kennen, possessive adjectives, personal pronouns, accusative prepositions, verbs with separable prefixes, dative case, among others.

Honors German 2

The second year German language course will be an expansion on vocabulary and grammar learned in the first year. You will continue to learn to express yourself in German on a variety of topics including: clothing items, birthdays, house/furniture, fun and work, sports, traveling, vacations, at home/chores etc. The main language in this

class will be German. Grammar points encountered include wissen/kennen, possessive adjectives, personal pronouns, accusative prepositions, verbs with separable prefixes, dative case, reflexive verbs, the past tense, adjectives and adverbs among others.

German 3

The third year German language course will be an expansion on vocabulary and grammar learned in the first and second year. You will continue to learn to express yourself in German on a variety of topics including: traveling, vacations, at home, going shopping and eating out/cooking etc. We will read a German book, as well as several short stories. Grammar points encountered include reflexive verbs, the past tense, adjectives and adverbs among others.

Spanish I

This course is an introduction to Spanish grammar, vocabulary, pronunciation, and culture. Students will learn basic greetings and goodbyes, numbers, simple vocabulary and verb structures, how to tell time, and how to describe people and things. Various aspects of culture (art, history, literature, geography) will also be studied.

Spanish II

This course is a continuation of the material used in Spanish I. Students will continue to learn elements of Spanish grammar and basic vocabulary for simple communication. Oral and written communication, reading and listening comprehension are addressed. Students will be exposed to some aspects of Hispanic culture.

Honors Spanish II

This course is a continuation of the material learned in Spanish I. Using the higher order thinking skills, students will continue to learn and practice elements of Spanish grammar and basic vocabulary for simple communication. Oral and written communication, reading and listening comprehension are addressed. Students will be exposed to aspects of Hispanic culture and art, as well as other enrichment activities.

Spanish III

This course is a continuation of the study of the Spanish language and culture learned in Spanish 2. Students learn elements of Spanish grammar and basic vocabulary for communication. Oral and written communication, reading, and listening comprehension are addressed. Students will be exposed to aspects of Hispanic Culture, and will develop a sense of cultural empathy, an awareness and understanding of a culture's customs, beliefs, and values

Honors Spanish III

This course builds on the grammar and vocabulary learned in Spanish II. After reinforcement of the previous year's curriculum, new vocabulary and verbs are studied, including the preterite and imperfect tenses, commands, and the subjunctive mood. Using the higher order thinking skills of analysis, evaluation, and creation, students will continue to learn and practice elements of Spanish grammar and basic vocabulary for simple and complex communication. Cultural studies include Spanish and New World history and art.

Honors Spanish IV

Students will continue in their study of Spanish grammar, including further exploration of the subjunctive, the future, conditional, and perfect tenses. Students continue work in reading, writing, listening and speaking while increasing knowledge of Hispanic culture through the literature of Latin American writers and artists. The class will be conducted primarily in Spanish and students are expected to use spoken Spanish in classroom conversation. Outside reading will also be assigned. Foreign Language Department

Social Studies Department

World Geography

World Geography is designed to help students to get a better understanding of our constantly changing and complex world. The knowledge, skills, and perspectives of the course are centered on the world's peoples and their cultural characteristics, landforms and climates, economic development, and migration and settlement patterns. We will study geography from the physical, political, and cultural prospective through the five basic geographical themes of location, place, human-environment interaction, movement, and region. Special emphasis will be placed on geographical skills, and geographic literacy (locating countries, capitals, & physical features of the world).

Civics

Civics is a one semester course emphasizing reading, writing and analysis skills through the study of United States government and political systems. Close textual analyses, primary source document analysis, and other fiction and nonfiction readings are used based on the Common Core Standards for Social Studies.

World History

World History is an in-depth study of our global community's past, emphasizing the people and events that changed past societies, and how these changes affect our modern society. Studies will begin with early civilizations and continue through the Cold War. A variety of instructional methods will be used including student – centered activities such as map reading, projects, presentations and brief essays.

Honors World History

This course is a survey of World history from ancient to modern times with emphasis on the development of modern Europe. Students must be able to work with a high degree of independence and have well defined reading, writing, and study skills. Independent research projects will be assigned and historical analysis of important events will be discussed.

AP World History

This course focuses on developing students' understanding of the world history from approximately 8000 BCE to the present. This college-level course has students investigate the content of world history for significant events, individuals, developments, and processes in six historical periods, and develop the use the same thinking skills and methods employed by historians when they study the past. The course also provides five themes that students explore throughout the course in order to make connections among

historical developments in different times and places encompassing the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania.

US History

This course is a survey of United States history from post-Reconstruction to the present. Teachers will use a variety of instructional methods including student activities such as map reading, projects, and presentations. Also emphasized is the use of original source documents and political cartoons.

Prerequisite - World History

Honors US History

This course is an intensive survey of United States history from post-Reconstruction to the present. Teachers will use a variety instructional methods including student-centered activities such as map reading, projects, presentations, and essays. Also emphasized is the use of original source documents, journals, outside reading sources in the form of both fiction and non-fiction texts to foster closer reading and comprehension and political cartoons. Attention is also given to national and world current events.

Prerequisite - World History

AP U.S. History

This course is a sophomore level college survey of American history from the 1500s until modern times. The class moves at a fast pace in order to prepare the students to take the Advanced Placement U.S. History Test in mid-May. The class emphasizes writing skills and the reading of original sources to prepare for the essay portions of the test. (requires Department and Academic Dean approval)

Personal Finance:

Personal Finance is a one semester course. Personal Finance will focus on financial planning, budgeting, using credit wisely, investing, and securing adequate insurance for all aspects of student's lives. Multiple forms of presentation, discussions and evaluations will be used throughout this course.

Honors Personal Finance

Honors Personal Finance is a one semester course. The course will focus on detailed financial planning, budgeting, using credit wisely, identity theft, buying a car and securing adequate insurance for all aspects of student's lives. Multiple forms of presentation, discussions and evaluations will be used throughout this course.

Economics

This course emphasizes analysis of the American economic system as it relates to the individual and other economic systems. Specific units will cover what is economics, economic systems and the American economy, the consumer's role, supply and demand, competition and monopolies, the American labor force, and monetary policy.

Honors Economics

Honors Economics emphasizes analysis of the American economic system as it relates to the individual and other economic systems. Specific units will cover microeconomic issues such as the law of supply and demand, factors of production, and the business cycle. Macroeconomic issues will include money and banking, monetary and fiscal policy, international trade and comparative economic systems. We will be touching on the history of economic thought as well as current economic issues.

Psychology

Psychology is a one semester course which covers the basics of the field of psychology. Important pioneers in the field are discussed along with basic theories and areas of study.

Sociology

Sociology is a one semester course which covers the basics of the field of Sociology. The emphasis is to help students understand human interaction in a group setting.

A.P. Government

A.P. Government is an intensive and extensive study of the formal and informal structures of government and processes of the American political system with an emphasis on policymaking and implementation. The class emphasizes writing and reading skills along with reading of original sources to prepare for the essay portions of the Government and Politics A.P. Exam. There is also a large volume of reading and interpretation to prepare for the Exam. Admission to the class requires Department and Academic Dean approval.

Informational Technology Department

IT

This course will focus on detailed use of Microsoft Office platforms including Microsoft Word, Powerpoint, Excel, and OneDrive. Keyboarding will also be covered during the first semester. Students will be evaluated through the use of presentations, typed documents, and written quizzes. IT is a one semester course.

Yearbook

This course focuses on the production of the school yearbook, distributed at the beginning of the next school year. Students learn skills in photography, photo editing, page design and copy writing. Students are responsible for taking photos and developing assigned pages and selling business ads.

Math Department

Algebra 1

This course covers the standard topics of Algebra 1. Emphasis is placed on integer operations and solving equations. The students will solve algebraically and graphically linear, quadratic, and absolute value equations, functions, systems of equations, and inequalities. Placement is based on math placement test AND NDHS admissions test.

Honors Algebra 1

This course covers the standard topics of Algebra 1 in more depth. The students will solve algebraically and graphically linear, quadratic, and absolute value equations, functions, systems of equations, and inequalities. Students will master all the properties of addition and multiplication, and they will apply them to factoring binomials, trinomials, and perfect squares. The course ends with an introduction to the quadratic formula and geometric sequences.

Placement is based on math placement test AND NDHS admissions test.

Honors Geometry

This class is an advanced geometry course that covers plane and solid geometry. Topics include foundations for geometry (points, lines, planes), angle relationships, parallel and perpendicular lines, triangles, quadrilaterals, circles, perimeter, area, volume, similarity, and trigonometric ratios. Emphasis is placed on formal proofs, critical thinking skills, and logical thinking for problems solving applications.

Prerequisites: Teacher recommendation; B or higher in Honors Algebra I

NOTE: Freshmen may be placed in Honors Geometry based on the math placement test AND NDHS admissions test.

Geometry A

This geometry class covers plane and solid geometry, but it is more hands-on than Geometry (B) or Honors Geometry. Topics include foundations for geometry (points, lines, planes), angle relationships, parallel and perpendicular lines, triangles, quadrilaterals, perimeter, area, volume, and trigonometric ratios.

Prerequisites: Algebra I

Geometry B

This geometry class covers plane and solid geometry. Topics include foundations for geometry (points, lines, planes), angle relationships, parallel and perpendicular lines, triangles, quadrilaterals, perimeter, area, volume, and trigonometric ratios. Students are introduced to proofs.

Prerequisites: Teacher recommendation; B or higher in Algebra I

Honors Algebra II

Honors Algebra II begins with a quick review of Algebra I topics, such as factoring quadratic expressions, followed by an in-depth study of first degree equations and inequalities and solving systems of equations and inequalities. Instruction continues with polynomial and radical equations and inequalities, focusing on the various ways to solve quadratic equations. A unit on discrete mathematics discusses arithmetic and geometric sequences and series, probability and statistics. If time permits, a unit on advanced functions and relations, which will include conic sections, rational expressions and equations, and exponential and logarithmic relations, will be covered. The course concludes with a preview of trigonometric functions, graphs and identities. ACT questions are woven into course instruction where appropriate. Outside projects dealing with real life applications of math or the history of mathematics are also assigned quarterly.

Prerequisites: Honors Algebra I and Honors Geometry; teacher recommendation

Algebra IIA

This course extends the concepts of Algebra 1, but it is more hands on than Algebra 2 (B). Emphasis is placed on solving equations and systems of equations as well as an exploration of polynomials and their functions. The quadratic and exponential functions are studied along with rational and radical expressions and equations. Graphing calculators and geometry are integrated throughout the program.

Prerequisites: Algebra 1 and Geometry; teacher recommendation

Algebra IIB

This course concentrates on extending and enhancing the algebra initiated during the student's previous year of Algebra 1, including concepts involving real numbers, linear and quadratic equations, and operations involving polynomials and irrational numbers. Also new material introduced in this algebra course are complex numbers, conic sections, exponential, logarithmic, and trigonometric functions, identities, circular functions and their inverses, matrices, and sequences and series.

Prerequisites: Algebra 1 and Geometry B; teacher recommendation

Honors Trigonometry/Pre-Calculus

This mathematics course is taught at an accelerated pace and covers a variety of trigonometric topics and advanced algebra topics. Theory is stressed. Topics include a general review of Algebra 2 concepts (exponents, radicals, factoring, rational expressions, linear equations, & complex numbers), functions and their graphs, polynomial functions, rational functions, exponential functions, logarithmic functions, trigonometric functions, and analytic trigonometry.

Prerequisites: Teacher recommendation; a minimum cumulative average of 90 in Honors Algebra II

Trigonometry/Pre- Calculus

This mathematics course covers a variety of trigonometric topics and advanced algebra topics. Topics include a general review of Algebra 2 concepts (exponents, radicals, factoring, rational expressions, linear equations, complex numbers), functions and their graphs, polynomial functions, rational functions, exponential functions, logarithmic functions, trigonometric functions, and analytic trigonometry.

Prerequisites: Teacher recommendation; B or higher in ACP Algebra II

Algebra 3

This course was created for students who need more practice with algebra concepts previously taught in Algebra I and Algebra II. The course relies on hands on activities and remedial drill. The pace of the course is relaxed and ample help and guidance is provided by instructor. Topics include: a review of the real number system, solving linear equations and inequalities, graphing linear equations and inequalities, solving systems of linear equations and inequalities, performing matrix operations, evaluating exponents, factoring polynomials, simplifying radicals, and solving and graphing quadratic functions.

Prerequisites: Algebra I, Geometry A, Algebra IIA

College Algebra

College Algebra focuses primarily on algebra application in business, the life sciences, or the social sciences. Topics include algebraic reasoning and logic, arithmetic and geometric sequences, systems of linear equations, quadratic equations, polynomial functions, exponential and logarithmic functions, mathematics of finance, growth and decay, and radical and higher degree polynomial functions.

Pre-requisites: Alg. 1, Geometry and Algebra 2; and an 18 on the Math section of the ACT

AP Calculus

This course is college level material. It includes the study of limits and their properties, derivatives, implicit differentiation, curve sketching, optimization problems, indefinite and definite integrals, differential equations, Riemann sums, area between curves, and volumes of solids of revolution.

Students who take this course must take the Advanced Placement test given in the spring.

Pre-requisites: Honors Trigonometry; Act Math Score of 25; teacher recommendation

Honors Calculus

This course is college level material. It includes the study of limits and their properties, derivatives, implicit differentiation, curve sketching, optimization problems, indefinite and definite integrals, differential equations, Riemann sums, area between curves, and volumes of solids of revolution.

Pre-requisites: Trigonometry or Honors Trigonometry; ACT score of 23; teacher recommendation

Physical Education Department

Yoga

Yoga is a science of mind, body and spirit practice designed to better understand and integrate the complex intersection of human experience, health, and well-being. This introductory class focuses on learning basic postures and practices to increase physical flexibility, strength, and balance while gaining access to ways of relieving mental stress and anxiety. Overall wellness is discussed as the students develop their own practices based on their personal health needs and goals.

Wellness

In this course, students will study and understand the importance and benefits of a healthy mind, body, and spirit. Students will be expected to fully participate and experience a wide variety of physical activities.

Weight Training

The purpose of this class is to learn the basic principles of strength training, the role of weight lifting in an overall program of health and wellness, and to acquire the necessary skills and experience to develop an individualized program for developing muscular strength and endurance.

Team Sports Course

Team Sports is a PE class designed to help students improve fitness, sports skills, teamwork and cooperation. Students will participate in a variety of physical activities.

Taekwondo

The principles of martial arts speak about character and spirituality through the virtues of courage, honesty, perseverance, loyalty, trust, integrity and humility. This class seeks to hone these virtues through the discipline of Taekwondo. The class also incorporates other forms of martial arts in order to form the strongest self-defense.

Religion Department

Religion I (Scripture and Revelation of Christ)

This course is designed to give students a general knowledge and appreciation of Sacred Scripture. They will learn how to read the Bible, becoming familiar with its major sections and books. Through their study of the Bible, especially the Gospels, they will come to encounter the living Word of God, the divine person Jesus Christ. This second part of the course will present Jesus Christ as the ultimate revelation to mankind from God. In learning about who Jesus is, the students will also learn who he calls them to be.

Religion II (Mission of Jesus and the Church)

This course is designed to help students understand all that God has done for mankind through his Son, Jesus Christ. Beginning with creation and proceeding to Jesus' Paschal Mystery, this course of study reveals God's plan for man's eternal happiness with him which has been made possible only in and through Jesus Christ. The second part of this course is to help the students understand that in and through the Church they encounter the living Body of Jesus Christ today. The focus of the course is not so much about events in the life of the Church as about the sacred nature of the Church herself, founded by Christ through the Apostles and sustained by him through the Holy Spirit.

Religion III (Grace and Morality)

This course is designed to help students understand the life of grace as the source of morality. Students will begin their study with the Beatitudes and continue with the Sacraments as the gifts given by Christ through His Church in and through which they can encounter Jesus Christ today in a full and real way. Students will examine each of the Sacraments in detail, but special emphasis will be placed on the Sacrament of the Eucharist. The second part of the course is to help students understand that it is only through Jesus Christ that they can fully live out God's plan for their lives. This course of study will present the moral concepts and precepts that govern the lives of Christ's disciples, studying in depth the Ten Commandments.

Religion IV Apologetics

In Apologetics, students apply an understanding of Church teaching to the questions commonly asked about the Catholic faith. They learn to respond to those questions using reason, Sacred Scripture, and Sacred Tradition so that they are able to clarify misunderstandings that arise in college and beyond. Students will receive ½ credit for Apologetics and ½ credit for Religion IV, Christian Vocation.

Religion IV Christian Vocation

Vocation is the calling or destiny we have in this life *and* hereafter. God has created the human person to know, love, and serve Him, that is, to be a saint. The fulfillment of this vocation is eternal happiness (*CCC*, glossary). The course *Christian Vocation* explores the meaning of the human person and human relationships in light of the call to holiness, with a careful treatment of the vocations to religious life, priesthood and marriage. Students will receive ½ credit for Religion IV, Christian Vocation and ½ credit for Religion IV, Apologetics.

Honors Religion and Culture (Jr./Sr. Elective)

Honors Religion and Culture is an interdisciplinary course that will use literature, theology, history, philosophy, art and music as lenses for examining the deep questions of life and Christian faith. Students will read, engage in class discussion, and write responses exploring both the texts themselves and the questions we encounter. This seminar course will encourage further development and confidence in oral and written skills. The texts we read and discuss will fuel an expanded view of the world, the human person, and our God of love.

Science Department

Biology

This course is designed to give the student an overview of the topics of general biology. The objectives for this course will be accomplished through lecture, lab activities, in-class activities, out of class assignments and projects. We will make frequent use of current literature from periodicals and newspapers and students will be required to conduct some independent research.

Honors Biology

This course is designed to give an in-depth overview of the major topics of biology using critical thinking, laboratory experiences, and traditional lecture. Student progress will be assessed using laboratory reports, exams, homework, quizzes, tests, and projects.

AP Biology

This class is a college level introductory biology course designed specifically to prepare the student to take the College Board Advanced Placement Biology Test in the spring. This class will be heavily comprised of lecture and laboratory exercises at the college level. Because of the academic nature of this course, students will be required to carry out large amounts of independent learning and studying for the A.P. test. This class is intended for the serious academic student who has an interest in the biological or medical fields as a career.

AP Environmental Science

This course is designed to explore the scientific concepts, principles and investigative practices for understanding the biotic and abiotic relationships in the environment as preparation for the College Board Advanced Placement Environmental Science exam. Special focus will be given to the effects and impact of human behaviors on environmental conditions and the potential problems and solutions that arise from those interactions.

Conceptual Physics

In order to give an overview of the major physics concepts, this sophomore course will cover Newton's laws of motion, gravitation, properties of sound, light and lenses, an introduction to electricity and magnetism, and the concepts of vibrations and waves. While mainly a conceptual course, this class will emphasize the in-depth math skills needed for future science courses. The objectives for this course will be accomplished through lecture, lab activities, in-class and out-of-class activities projects, tests and quizzes. We will make frequent use of current literature from periodicals and newspapers and students may be required to conduct some independent research.

Honors Physics

This class is an introduction to the fundamental principles of physics with an emphasis in Mathematics, problem solving and critical thinking. The topics include mechanics, waves and electricity while incorporating vectors, graphs and scientific measurement. Motivated students may take this class as an elective after completing the Conceptual Physics course.

Chemistry

This course is an introduction to the fundamental principles of chemistry and its applications to everyday life. The class includes lectures, demonstrations, experiments, labs, discussions, presentations, reading, graphing, homework, quizzes, projects and tests. Students not only work independently, but also work with a partner or small group in class.

Honors Chemistry

This course is designed to give the student an in-depth overview of the topics of general chemistry. This course will have a strong emphasis in analysis and mathematical computation. Students will develop problem solving skills and will learn how to make informative and detailed observations. Laboratory exercises are used to enhance understanding of chemical principles and demonstrate laboratory principles and techniques. Topics include: Properties and Changes of Matter, the Periodic Table, Atomic Structure, The Elements, Chemical Reactions, Gases, Nuclear Chemistry, Food Chemistry, Acids and Bases, Chemistry and Society.

AP Chemistry

This course is a college level introductory chemistry course designed specifically to prepare the student to take the College Board Advanced Placement Chemistry Test in the spring. This course is heavily comprised of lecture and college level laboratory exercises. Students will be required to engage in large amounts of independent learning, before school review sessions and summer preparatory work. Topics covered include the organization and reactions of matter and the elements, bonding theory, stoichiometry, chemical kinetics, acid/base equilibrium, thermochemistry, electrochemistry, and selected topics in organic and nuclear chemistry. This class is intended for the serious academic student who has an interest in chemical, biological and/or engineering fields

Biochemistry

This course, although called biochemistry, is designed to provide an overview and introduction of general chemistry, biochemistry, and organic chemistry with a focus on health and human anatomy and physiology.

Human Anatomy and Physiology

This course is designed to introduce the student to the cells and tissues of the human body, as well as terminology and procedures used in the health care field. The anatomy and physiology of the major systems of the human body will be studied. The study of diseases and conditions for each system is emphasized with special consideration on cardiovascular health and diet. This course is strongly recommended for any student interested in a medical or veterinary career.

Microbiology

This semester course is designed to expose the students to a variety of microbiological concepts and give the student an overview of the relationship between microbes and our lives through lecture, discussions, demonstrations and hands-on activities. Students who are interested in a medical or health profession will find this course beneficial. Microbiology will emphasize a survey of the traditional microbes and their roles as agents in health and disease.

Medical Terminology

This semester course presents a study of basic medical terminology vocabulary for use in the health care setting using basic techniques of word building. Emphasis is on basic anatomical, physiological, pathology, diagnostic procedures, and pharmacological terms. Prefixes, suffixes, word roots, combining forms, special endings, plural forms, abbreviations, and symbols are included in the content providing the opportunity to interpret unfamiliar terms.

Forensic Science

This class is designed as a science elective for all students. The class is an application of biology, chemistry and physics to various legal questions, with an emphasis in problem solving, critical thinking, and experiments. Topics include the study of various types of evidence, such as fingerprints, shoeprints, DNA, hair, toxicology and forgery.