



North Catholic High School AP/ CHS / Honors Course Offerings

The College Board: Advanced Placement Program®

The Advanced Placement Program® enables willing and academically prepared students to pursue college-level studies — with the opportunity to earn college credit, advanced placement, or both — while still in high school. AP Exams are given each year in May. Students who earn a qualifying score on an AP Exam are typically eligible to receive college credit and/or placement into advanced courses in college. Every aspect of AP course and exam development is the result of collaboration between AP teachers and college faculty. They work together to develop AP courses and exams, set scoring standards, and score the exams. College faculty review every AP teacher's course syllabus.

For general AP questions, please contact Mrs. Mia Gantz at mgantz@northcatholic.org.

Course Offerings

AP Art History (Elective)

Contact: Arts Department

Prerequisite: Students should have successfully completed a high school history course/ teacher approval.

AP Art History is equivalent to a two-semester introductory college course that explores the nature of art, art making and responses to art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from pre-history to the present, the course fosters an in-depth, holistic understanding of art from a global perspective. Students become active participants in the global art world engaging with its forms and content. They experience, research, discuss, read and write about art, artists, art making, responses to and interpretations of art. Students should expect to learn about 250 works of art. This course is the equivalent of a 2 semester college course. They will be asked to identify artwork categorized by geographic location and chronological order. The course is an overview of art from prehistoric through contemporary times.

Summer Assignment: NONE

AP Art Studio (Elective)

Contact: Arts Department

Prerequisite: Students should have successfully completed a high school art studio course/ teacher approval.

The AP Program offers three studio art courses and portfolios: Two-Dimensional Design, Three-Dimensional Design, and Drawing. The AP Studio Art portfolios are designed for

students who are seriously interested in the practical experience of art. Students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consists of three portfolios — 2-D Design, 3-D Design and Drawing — corresponding to the most common college foundation courses. Students may choose to submit any or all of the Drawing, Two-Dimensional Design, or Three-Dimensional design portfolios. AP Studio Art students create a portfolio of work to demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions. Students should expect to work a minimum of 6 hours a week (a typical college course would meet 2 times a week, for 3 hours.) They will be expected to work outside of the classroom and to keep a sketchbook/ journal. Individual and group critiques will be used to analyze and improve student's artwork. *Summer Assignment: Students must choose their portfolio: 2D, 3D or Drawing. They should decide on the theme or central idea that their portfolio will center around (concentration). They must also complete at least 2 pieces during the summer.*

AP Biology

Contact: Science Department

Prerequisite: A 90% or higher in Honors Biology, 97% in Academic Biology, 85% or higher in Honors Chemistry and teacher recommendation

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions.

This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry- based investigations that provide students with opportunities to apply the science practices.

Summer Assignment: Selected non-fiction book with comprehension questions, textbook chapter readings and notes.

AP Calculus AB

Contact: Math Department

Prerequisite: A 93% or higher in Honors Pre-Calculus / Trigonometry and teacher recommendation

Advanced Placement Calculus AB is a course based on content established by the College Board. Calculus AB is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: (1) functions, graphs, and limits; (2) derivatives; and (3) integrals. Technology should be used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

Summer Assignment: The unit circle and common function graphs will be reviewed.

AP Calculus BC

Contact: Math Department

Prerequisite: An 85% or higher in AP Calculus AB or a 93% or higher in Honors Calculus and teacher recommendation

Advanced Placement Calculus BC is a course based on content established by the College Board. Calculus BC is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course

emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: (1) functions, graphs, and limits; (2) derivatives; (3) integrals; and (4) polynomial approximations and series. Technology should be used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

Summer Assignment: NONE

AP Chemistry

Contact: Science Department

Prerequisite: An "A" in Honors Chemistry and teacher recommendation

AP Chemistry is designed to provide students with a detailed understanding of the interaction of matter and energy. Scientific methodology will be employed in experimental and analytical investigations, and concepts will be illustrated with practical applications. Students will understand and use safety precautions with chemicals and equipment. The course emphasizes qualitative and quantitative study of substances and the changes that occur in them.

Summer Assignment: Chemistry 1 Review Packet

AP Computer Science A

Contact: Science Department

Prerequisite: Algebra II & Introduction to Computer Programming OR Teacher Approval

AP Computer Science A is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

Summer Assignment: Introduction to Computer Science Packet (including videos, readings, questions, and a few beginning programs)

AP English Language and Composition

Contact: English Department

Prerequisite: A 93% average or higher in Honors English and teacher recommendation

An AP English Language and Composition course cultivates the reading and writing skills that students need for college success and for intellectually responsible civic engagement. The course guides students in becoming curious, critical, and responsive readers of diverse texts, and becoming flexible, reflective writers of texts addressed to diverse purposes. The reading and writing students do in the course should deepen and expand their understanding of how written language functions *rhetorically*: to communicate writers' intentions and elicit readers' responses in particular situations. The course cultivates the rhetorical understanding and use of written language by directing students' attention to writer/reader interactions in their reading and writing of various formal and informal genres (e.g. memos, letters, advertisements, political satires, personal narratives, scientific arguments, cultural critiques, research reports).

Reading and writing activities in the course also deepen students' knowledge and control of formal conventions of written language (e.g. vocabulary, diction, syntax, spelling, punctuation, paragraphing, and genre). The course helps students understand that formal conventions of the English language in its many written and spoken dialects are historically, culturally, and socially produced; that the use of these conventions may intentionally or unintentionally contribute to the effectiveness or ineffectiveness of a piece of writing in a particular rhetorical context; and that a particular set of language conventions defines Standard Written English, the preferred dialect for academic discourse.

Summer Assignment: Three novels, a quiz, and a paper/project

AP English Literature and Composition

Contact: English Department

Prerequisite: A "B" (85%) average in AP Language & Composition and teacher recommendation

English Literature and Composition, Advanced Placement, is an advanced placement course based on content established by the College Board. An AP English course in Literature and Composition engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller scale elements as the use of figurative language, imagery, symbolism, and tone. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit.

Summer Assignment: Three novels, a quiz, and a paper/project

AP European History

Contact: History Department

Prerequisite: 85% or higher in AP US History or 93% or higher in Honors US History

AP European History focuses on developing students' abilities to think conceptually about European history from approximately 1450 to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance — interaction of Europe and the world, poverty and prosperity, objective knowledge and subjective visions, states and other institutions of power, and individual and society — provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make

Summer Assignment: Extensive mapping and vocabulary assignment along with a biography and book review

AP French Language and Culture

Contact: World Languages Department

Prerequisite: A 93% or higher in Honors French III

As this course is equivalent to an intermediate college-level French course, it is conducted in a seminar fashion, whereby the students are expected to participate and help organize the course. Students are introduced to (or review) vocabulary and grammatical structures in context. The three modes of communication (Interpersonal, Interpretive and Presentational) defined in the Standards for Foreign Language Learning in the 21st Century are foundational to the APR French Language and Culture course. Course work provides students with opportunities to demonstrate their proficiency in each of the three modes in

the intermediate to pre-advanced range as described in the ACTFL Performance Guidelines for K–12 Learners. Students who enroll in this course should already have a good command of the grammar and considerable competence in listening, reading, speaking and writing. When communicating, students in the AP French Language and Culture course demonstrate an **understanding of the culture(s)**, incorporate interdisciplinary topics (connections), make comparisons between the native language and the target language and between cultures (comparisons), and use the target language in real-life settings (communities). In the classroom the exclusive use of French by teacher and students for active communication is allowed. Students use authentic materials and resources that are in accordance with those suggested on the College Board website.

Summer Assignment: There is a summer packet that will be due on the first day of school.

AP Latin: Caesar and Vergil

Contact: World Languages Department

Prerequisite: A 93% or higher in Honors Latin III.

The AP Latin course focuses on the in-depth study of selections from two of the greatest works in Latin literature: Vergil's Aeneid and Caesar's Gallic War. The course requires students to read texts, identify grammatical elements, explain the meaning of words and phrases in context, and analyze and interpret the text. The course is structured around seven themes: Literary Genre & Style, Roman Values, War & Empire, Leadership, Views of Non-Romans, History & Memory, and Human Beings & the Gods

Summer Assignment: Summer reading of Vergil and Caesar in English is required.

AP Physics 1

Contact: Science Department

Prerequisite: 90% or above in both Honors Chemistry and Algebra II

AP Physics 1 is an algebra-based course in general physics that meets seven times a week for the entire school year. General physics topics presented during the course closely follow those outlined by the College Board and also mirror an introductory level university physics course. AP Physics 1 is organized around six big ideas that bring together the fundamental science principles and theories of general physics. These big ideas are intended to encourage students to think about physics concepts as interconnected pieces of a puzzle. The solution to the puzzle is how the real world around them works. The students will participate in inquiry based experiments of these topics to gain a more conceptual understanding of these physics concepts. Students will spend most of their time on efforts to develop critical thinking. **This course will move at a faster pace and include topics from algebra, geometry and trigonometry.**

Summer Assignment: Problem Packet

AP Spanish Language and Culture

Contact: World Languages Department

Prerequisite: A 96% or higher in Honors Spanish III or a 93% or higher in Honors Spanish IV and a teacher recommendation.

The AP Spanish Language and Culture is a rigorous course taught only in Spanish and focuses to improve proficiency in the target language. Students will receive brief reviews of grammar and vocabulary, but will mainly focus on reading, writing, speaking, and listening. Students will communicate using diverse, advanced vocabulary and grammatical structures as they build proficiency in all modes of communication (interpersonal, interpretive, and presentational) toward the pre-advanced level. The course uses a variety of authentic resources through the Temas text, audio and visual aids, current event articles, literature, as well as through a variety of charts, tables, and graphs. This course fully integrates Connections, Comparisons, and Communities from the Curriculum Framework. The course is broken down in to 6 thematic units with essential questions.

Summer Assignment: Reading and grammar packet with speaking assignment.

AP Spanish Literature and Culture

Contact: World Languages Department

Prerequisite: A 95% or higher in AP Spanish Language. It is not possible to waive into this class without having thoroughly studied the language in the AP Spanish Language class.

AP Spanish Literature follows the AP Board's outline of extensive required readings and assessments. The course is divided into six units which each contain literature that will be analyzed for content, historical perspective, and literary tools. All discussion and assessment will be done in Spanish. The major grading components for this class will be the daily discussion of the literature, vocabulary quizzes, biographical writing on the authors, essays answering essential questions on each piece of literature, comparative essays including literary analysis, and mini practice exams. Both formal and informal oral assessments will be given frequently. This class will be conducted entirely in Spanish.

Summer Assignment: Students will complete biographies for the authors on the required reading list and comprise a list of definitions for literary terms.

AP U.S. History

Contact: History Department

Prerequisite: An 85% or higher in AP World History or a 93% or higher in Honors World History and a teacher recommendation.

This course is designed to give students the opportunity to perform at the highest levels on the AP US History exam. Topics from pre-history to the present are covered in great detail. There will be extensive out of class reading, research, and writing and class will move at a rapid pace. Readings will be assigned on a daily basis. There is also a unique writing component to the AP exam and students will spend a significant amount of time preparing for it. Students also have the opportunity to earn six college credits through the College in High School courses offered by LaRoche College while taking AP US History.

Summer Assignment: Students will read the first eight chapters of the textbook. This includes pages 4-156, answer a series of multiple choice questions, and answer seven long essay questions based on the reading.

AP World History

Contact: History Department

Prerequisite: 93% or higher in Honors World Regional Geography and teacher recommendation

The AP World History course content is structured around the investigation of five course themes and 19 key concepts in six different chronological periods, from approximately 8000 B.C.E. to the present. The AP World History course develops students' capacity and ability to think and reason in a deeper, more systematic way, better preparing them for subsequent college courses. The course provides balanced global coverage, with Africa, the Americas, Asia, Oceania and Australia, and Europe all represented. No more than 20 percent of course time is devoted to European history.

Summer Assignment: Extensive mapping and vocabulary assignment.

**Courses are run according to student interest and instructor availability. Not every AP course will run every semester.*

College in High School Program

LaRoche CHS: The Scholar Program is a concurrent enrollment partnership between La Roche College and a number of western Pennsylvania high schools. Since 1995, Scholar has enabled qualified sophomore, junior, and senior high school students to earn credits toward a college degree. With this program, La Roche College wants to provide a direct connection between a secondary and post-secondary institution and an opportunity for collegial collaboration. Scholar's goal is not only to allow high school students to earn college credits, but to earn college credits through La Roche's admirable mission.

University of Pittsburgh CHS: College in High School (CHS) offers regional high school students the opportunity to earn both high school and University of Pittsburgh credit in courses taught right in their classrooms. College in High School is an academically rigorous program for motivated students seeking an intellectual challenge within a supportive high school environment.

For more than 30 years, College in High School's success has stemmed from close collaboration between the Kenneth P. Dietrich School of Arts and Sciences and regional high schools. CHS-certified high school teachers work closely with Pitt's world-class faculty to teach a high school course that is also a University of Pittsburgh course. Students use college-level textbooks, take college-level exams, and upon successful completion of the class, earn college credit that is recorded on an official University of Pittsburgh transcript.

CHS Course Offerings

CHS Argumentation (Elective)

Contact: English Department

Prerequisite: Signature of the current English teacher

Argumentation is a College in High School course supported by the Dietrich School of Arts and Science at the University of Pittsburgh. Argumentation gives students a broad background in the general types of debate and discussion that have taken place in various cultures and in different times. Opportunities are provided for securing theoretical knowledge of debate and gaining practical experience in reasoning and argumentation. Theory comes from analysis of debate procedures. Experience comes from observing and judging debates, and participating in debate tournaments and student congress. The year begins with a look at debate resolutions and the methods of arguing them in academic debate circles. After informal impromptu debates are held, students move into congressional debate, then public forum debate and finally Lincoln Douglas debate. If time permits, students also look at mock trial as debate. Position papers are written and presented several times for each type of debate.

Summer Assignment: NONE

Honors Religion IV (CHS)

Contact: Religion Department

Prerequisite: A 90% or higher in Honors Religion III

This course covers the same Diocesan curriculum as Religion IV. In addition, 2-4 works of Catholic theology, Catholic literature, apologetics, and/or spiritual writings of the saints will be included throughout the year. Students will engage this additional material by means of discussion, class presentations, and academic writing.

Summer Assignment: Read either Invisible Man (Ellison), or The Color of Water (McBride) and Laudato Si (Pope Francis).

CHS Statistics

Contact: Math Department

Prerequisite: 93% or higher in Honors Algebra 2 and teacher recommendation

CHS Statistics is the high school equivalent of a one-semester, introductory, college statistics course (STAT0200) through the University of Pittsburgh. The curriculum emphasizes applying statistical skills to solve problems. The topics covered include: basic descriptive statistics for univariate and bivariate data, elementary probability theory, random samplings from populations and random allocation to experimental treatments, sampling distributions, confidence intervals, hypothesis testing for mean (one and two sample), hypothesis testing for variance (one and two sample), hypothesis testing for proportion (one and two sample), hypothesis testing for paired data, one way ANOVA tests, chi-square tests and the f distribution, and linear regression. Students will utilize the Texas Instruments TI-84 models of the graphing calculator as well as some statistical computing software (such as MINITAB). Students will complete graded assignments throughout the year as well as a comprehensive final exam, earning credits through the University of Pittsburgh. The end result will be an official transcript from the University of Pittsburgh for their STAT 0200 Basic Applied Statistics 4 credit course.

Summer Assignment: NONE

CHS US History

Contact: History Department

Prerequisite: An 85% or higher in AP World History or a 93% or higher in Honors World History and a teacher recommendation.

Topics from pre-history to the present are covered in great detail. There will be extensive out of class reading, research, and writing and class will move at a rapid pace. Readings will be assigned on a daily basis. There is also a unique writing component to the AP exam and students will spend a significant amount of time preparing for it. Students also have the opportunity to earn six college credits through the College in High School courses offered by LaRoche College while taking AP US History. The two courses that are offered through LaRoche are US History 1607-1865 and US History 1865-1945. Due to the rigor of the AP program, we are able to offer both of these courses.

Summer Assignment: Same as AP US History.

**Courses are run according to student interest and instructor availability. Not every CHS course will run every semester.*

Honors Course Offerings

*Note: Courses if not otherwise marked, are ordered in sequence.

English

Honors English 10: World Literature

Contact: English Department

Prerequisite: A "B" (85%) average in Honors English 9 or 95% or higher average in English 9 and teacher recommendation

The English 10 Honors World Literature course discovers different aspects of the world and investigates multiple global perspectives as they are presented through various modes of literature. In contrast to the standard English 10 course, the Honors class moves at a quicker pace, with more rigorous material. This class strives to impart and improve reading comprehension, critical thinking, vocabulary, grammar, usage, and writing skills through varied texts, activities, and instruction. As such, students can expect to encounter the following processes in and out of the classroom throughout the year. By expanding their cultural boundaries, students study the subjects of diversity and prejudices while recognizing their role as global citizens. The goals of this course are to help students improve their ability to read for understanding, to encourage students in using effective modes of discourse about what they read, to assist students in writing about life and literature, and to engender creative methods of synthesis and application of literary and cross-cultural ideas. Further, this course aims to expose students to unfamiliar ideas and histories from several other cultures and invites them to interact honestly but respectfully with those ideas.

Summer Assignment: Two novels, a quiz, and a project/paper

Honors English 11: American Literature

Contact: English Department

Prerequisite: A "B" (85%) average in Honors English 10 or 95% or higher average in English 10 and teacher recommendation

English 11 is an integrated English course based on Pennsylvania Academic Standards for English/Language Arts in Grades 11 & 12. Students will refine and enhance foundational literacy, information, and communication skills through academic rigor and depth. Students read, study, and write about major works of American literature. School-to-career experiences, including college entrance exam preparation and the ability to think, speak, and write logically in the workplace are a primary focus. Challenging research and writing skills will be emphasized. Honors students will cover more material in greater depth at a faster pace in preparation for AP and additional CHS level English courses. This college level English course engages students in group discussion and individual presentations surrounding literature, as they analyze a broad array of topics. Students work independently on a significant amount of reading, research, and writing included in this college level course.

Summer Assignment: Two novels, a quiz, and a paper/project

Honors English 12: British Literature

Contact: English Department

Prerequisite: A "B" (85%) average in Honors English 11 or 95% or higher average in English 11 and teacher recommendation

English 12 an integrated English course based on Pennsylvania Academic Standards for English/Language Arts for Grade 12, is a study of language, literature, composition, and oral communication focusing on an exploration of point of view or perspective across a wide variety of British literature. This course prepares seniors for college level English courses. It includes a cross section of the literacy skills developed through real-world applications in reading, writing, listening, and speaking.

Summer Assignment: Two novels, a quiz, and a paper/project

Math

Honors Algebra II

Contact: Math Department

Prerequisite: An 85% or higher in Honors Geometry and/or teacher recommendation

Algebra II builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematic Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Honors Algebra II covers material at a greater depth and faster pace.

Summer Assignment: NONE

Honors Pre-Calculus/Trigonometry

Contact: Math Department

Prerequisite: An 85% or higher in Honors Algebra II and/or teacher recommendation

Pre-Calculus/Trigonometry is a course designed to extend the foundations of algebra and functions developed in previous courses. The four major topics include: (1) functions and graphs, (2) polynomials and rational functions, (3) exponential and logarithmic functions, and (4) trigonometric functions. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses. Honors Pre-Calc/Trig covers material at a greater depth and faster pace.

Summer Assignment: NONE

Honors Calculus

Contact: Math Department

Prerequisite: An 85% or higher in Honors Pre-Calculus/Trigonometry and/or teacher recommendation.

This course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: (1)

functions, graphs, and limits; (2) derivatives; and (3) integrals. An emphasis is placed on conceptual understanding and applications to economics, engineering, and the sciences.

Summer Assignment: NONE

Religion

Honors Religion III: Sacraments/Morality

Contact: Religion Department

Prerequisite: A 93% or higher in Religion II

The purpose of the Sacraments course is to help students understand that they can encounter Christ today in a full and real way in and through the sacraments, and especially through the Eucharist. Students will examine each of the sacraments in detail so as to learn how they may encounter Christ throughout life. Topics discussed include form and matter of each sacrament, the sacramental nature of the Church, the effects of each Sacrament, the minister of each Sacrament, and qualifications for reception of each of the Sacraments. The Honors Sacraments course involves reading of a text on the Liturgy as well as other articles that illustrate the sacramental nature of the Church. The purpose of the Morality course is to help students understand that it is only through Christ that they can fully live out God's plans for their lives. Students are to learn the moral concepts and precepts that govern the lives of Christ's disciples. Honors morality involves interpretation of Church encyclicals on morality and an extra component for bioethics.

Summer Assignment: NONE

Science

Honors Physics

Contact: Science Department

Prerequisite: 85% or higher in Honors Chemistry, or 95% or higher in Chemistry.

This foundation course is a full year class based on Scientific Inquiry. Physics is the study of the fundamental laws that determine the workings of the universe. This course emphasizes the mathematical and conceptual development of the following topics: Mechanics, Work and Energy, Waves and Sound, and Electricity, and is typically taken junior year. Students will be able to: Identify questions and concepts that guide scientific investigations, Design and conduct scientific investigations, Use technology and mathematics to improve investigations and communications, Formulate and revise scientific explanations and models using logic and evidence, Recognize and analyze alternative explanations and models, Communicate and defend a scientific argument, Understand about scientific inquiry. Each unit in this physics class will focus on a single "model" of the physical universe. A model is a set of representations that can be used to explain a situation and predict what will happen in similar situations. This is how the earliest scientists characterized the world around us. Each unit will begin with a paradigm lab and give students the opportunity to explore the physical universe. Then, using the shared experience, students will characterize the physical universe.

Summer Assignment: NONE

Honors Biology

Contact: Science Department

Prerequisites:

This course is designed to be a rigorous introductory course for college bound students interested in some field of science or medicine. This class will utilize reading, writing, and higher order thinking skills in order to develop competency in the sciences. Students will

analyze, interpret, and evaluate the validity of experimental data in order to draw conclusions about biological principles. The topics covered in this class include: Characteristics of Life, Classification, Biochemistry, Cells, Mitosis, Meiosis, Genetics, Homeostasis, Cellular Transport, Bioenergetics, Biotechnology, Evolution, and Ecology. Lab activities are included in every unit to enhance learning and understanding. Students taking Honors Biology should realize that there is an obligation to do a considerable amount of work outside the classroom, both in individual studies and group work.

Summer Assignment: NONE

Honors Chemistry

Contact: Science Department

Prerequisites: An 85% or higher in Honors Bio, an 85% in Algebra I, and teacher recommendation.

Honors chemistry is designed to provide students with a detailed understanding of the interaction of matter and energy. Scientific methodology will be employed in experimental and analytical investigations, and concepts will be illustrated with practical applications. Students will understand and use safety precautions with chemicals and equipment. The course emphasizes qualitative and quantitative study of substances and the changes that occur in them. The Honors course should be taken by students who may be majoring in science in college. It is designed to prepare students for AP Chemistry. Students should take Biology as a pre-requisite or corequisite.

Summer Assignment: NONE

Honors Human Anatomy and Physiology

Contact: Science Department

Prerequisite: An 85% or higher in Biology

This course offers basic concepts in human anatomy and physiology. Emphasis will be placed on the study of structures, functions, and dysfunctions of the major systems of the human body, including skeletal, muscular, nervous, sensory, circulatory, digestive, endocrine, and reproductive systems. Lab investigations and dissections will be utilized for comparative anatomy illustrations. This course is directed toward student preparation for higher education and furthering studies in the life sciences, building foundations for scientific or health-related careers. This is a valuable class to those students interested in a career in the medical field.

Summer Assignment: NONE

Social Studies

Honors Modern World History

Contact: History Department

Prerequisite: An 85% or higher in AP Honors World Regional Geography or a 93% or higher in World Regional Geography and a teacher recommendation.

This year-round course is designed for the advanced history student and is writing intensive. Students will engage in studying world history from the 14th through 20th centuries. Historical study will begin with the Renaissance era and conclude with World War II. Students will be presented with a series of lectures, audio-visual supplements, and readings to acquaint them with the moving forces behind the major events in world history. Students will be graded using a variety of assessments including (but not limited to): unit essays, objective testing, reading quizzes, and small chapter projects. Students are expected to abide by the student handbook for behavior and academic integrity.

Summer Assignment: One book

Honors U.S. History

Contact: History Department

Prerequisite: An 85% or higher in AP Honors World History or a 93% or higher in World History and a teacher recommendation.

The Honors U.S. History course focuses on developing students' understanding of American history from approximately 1491 to the present. The course has students investigate the content of U.S. history for significant events, individuals, developments, and processes in nine historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides seven themes (American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society) that students explore throughout the course in order to make connections among historical developments in different times and places. Students will be assigned readings from a college level textbook on a regular basis.

Summer Assignment: Students will read the first eight chapters of the textbook. This includes pages 4-156, answer a series of multiple choice questions, and answer three long essay questions based on the reading.

World Language

Honors French II

Contact: World Languages Department

Prerequisites – 90% or better in French I

French II builds on the student's elementary knowledge of French and is designed to develop the fundamental skills necessary for genuine oral and written communication. Topics studied include travel, summer and winter sports, clothes, physical fitness and health, and cars and road regulations. Students also continue learning about French history and the traditions of other Francophone cultures.

Summer Assignment: None

Honors French III

Contact: World Languages Department

Prerequisites –90% or better in French II

French III continues to develop the student's ability to effectively communicate on everyday topics such as daily routine, environment, medical care, city life, university studies and careers. All communication is in French. An intensive review of grammar accompanies an introduction to French literature and literary analysis. Guided essays and conversations on topics discussed are geared toward sharpening a student's descriptive and narrative prose. In addition to continued instruction in the history of France, students are also exposed to Francophone culture and history via activities, discussions, films and projects.

Summer Assignment: None

Honors French IV

Contact: World Languages Department

Prerequisites – 90% or better in French III

French IV is designed to teach students to verbally communicate and write wholly in French by focusing on readings about milestone events and important figures from the Renaissance to the Modern period. Students will discuss topics that require intensive use of advanced grammar patterns. Emphasis will be placed on correct pronunciation, inflection, intonation, as well as reading for content, theme, vocabulary development, cultural and historical context and nuance. Students will pursue this intensive study of literature and literary analysis through short stories, poems, novels and passages from important works by French and Francophone (Canadian, African, Caribbean) writers.

Summer Assignment: None

Honors Latin III

Contact: World Languages Department

Prerequisite: 90% or better in Latin II

This course is designed to acquaint students with a greater body of Roman literature. Students will continue develop the skills presented in Latin 1 and 2, with an emphasis on varied reading selections. Students will continue to develop an understanding of the history and culture of the Romans, especially during the 1st century A.D. empire. In addition, students will continue their study of prayers in Latin and will read excerpts from the Vulgate.

Summer Assignment: Independent vocabulary and grammar review with quiz at beginning of year.

Honors Latin IV

Contact: World Languages Department

Prerequisite: 90% or better in Latin III

This course is designed for students who wish to further hone their translation skills through varied reading selections, with an emphasis on authentic text. Students will have the opportunity to analyze texts and complete individual research through monthly current events article critiques. In addition, students will continue their study of prayers in Latin and will read excerpts from authors such as St. Augustine.

Summer Assignment: Independent vocabulary study with quiz at beginning of year.

Honors Spanish II

Contact: World Languages Department

Prerequisite: Student must have at least a 90% in Spanish I to enter.

Second year Spanish is a continuation of the first year with greater emphasis on content vocabulary and speaking. Verb tenses are reviewed and new tenses are introduced. Sentence structure, both oral and written, is more involved and listening skills are developed through pronunciation and question-answer drills. New grammar and idioms will be introduced. Students will be encouraged to communicate with the teacher and classmates in Spanish. Students will develop cultural understanding, reading and writing skills through passages in the text and supplemental materials. Listening exercises play an important role in oral expression and comprehension. Both formal and informal oral assessments will be given frequently. This class will be conducted mainly in Spanish. As this is an honors course, the pace and use of Spanish will be more than that of an academic class.

Summer Assignment: Independent vocabulary study with quiz at beginning of year.

Honors Spanish III

Contact: World Languages Department

Prerequisite: Students must have at least a 90% in H. Spanish II or 96% in Spanish III to enter.

This course stresses oral proficiency. The third year Spanish course will provide a review of previously taught grammar. Advanced grammar concepts will be presented, especially with the past tense, along with extended reading and writing practice. A practical knowledge and use of Spanish is stressed, especially through conversation. Whether students are college-bound or not, three years of a language will prove to be of great value in tomorrow's world. Listening exercises play an important role in oral expression and comprehension. Both formal and informal oral assessments will be given frequently. Daily prayers in Spanish will be an integral part of the classroom routine. This class will mainly be conducted in Spanish. This course's pace and rigor will reflect the honors level and prepare students for higher levels of Spanish learning.

Summer Assignment: Independent vocabulary and grammar study with quiz at beginning of year.

Honors Spanish IV

Contact: World Languages Department

Prerequisite: Student must have at least a 90% in H. Spanish III to enter.

This course stresses oral proficiency. Fourth year Spanish continues learning of complex grammar concepts and vocabulary. Advanced grammar concepts will be presented along with extended reading and writing practice. A practical knowledge and use of Spanish is stressed, especially through conversation. Whether students are college-bound or not, four years of a language will prove to be of great value in tomorrow's world. Listening exercises play an important role in oral expression and comprehension. Both formal and informal oral assessments will be given frequently. Conversational skills will be stressed and challenged in this class. Cultural activities will also play a vital role during lessons. Daily prayers in Spanish will be an integral part of the classroom routine. Students are encouraged to speak mainly in Spanish. Students encounter culture through projects and technology. The rigor and pace of this course reflects the honor class level.

Summer Assignment: Independent vocabulary and grammar study with quiz at beginning of year.

**Courses are run according to student interest and instructor availability. Not every Honors course will run every semester.*

Contact Information

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