

# Nazareth Academy Curriculum Guide

2010-2011

## Introduction

Nazareth Academy is a Catholic, coeducational, college prep high school dedicated to living Jesus' mission of unity and committed to educating the whole person. Above all we value scholarship, service, spirit, and unity.

Nazareth Academy does not discriminate on the basis of race, color, gender, national or ethnic origin in the administration of its educational policies, privileges, programs or activities.

Use this Curriculum Guide to plan a four-year course of studies that will help you achieve your goals for college and for personal growth.

While college entrance requirements vary, the best preparation for college, ACT and SAT exams is to be an avid reader and to take full advantage of course offerings in all academic areas.

## Graduation Requirements

Religion	3.0 credits	(four years *)
English	4.0 credits	
Mathematics	3.0 credits	(algebra 1, geometry, algebra 2)
Science	3.0 credits	(all courses are lab science)
Social Studies	3.0 credits	(including US history, Cont Wrld Iss)
Foreign Language	2.0 credits	(same language)
Fine Arts	1.0 credit	
Phys. Ed./Health	1.0 credit	(two years)
Flexible credits	<u>2.0</u> credits	
Total	22.0 credits	

\*Graduation requirements also include: 10 hours of community service sophomore year; and 10 hours of community service and an overnight, two-day retreat junior year.

## The School Day

Students are expected to be in school from the first bell at 7:50 a.m. until the 3:00 dismissal bell. The school day consists of seven class periods and a lunch period. An activity period after school until 3:30 p.m. is available for contact with teachers, use of the library and computer labs, and extracurricular activities. Early dismissal days when students are dismissed at 1:30 generally occur twice a month for faculty and staff meetings.

## **Curriculum**

Courses are offered at college prep, honors, and advanced placement levels. Weighted grades are given for honors and advanced placement courses.

### **COLLEGE PREP**

All of Nazareth Academy's courses are college preparatory. Students who satisfy the graduation requirements are well prepared for succeeding in the college of their choice.

### **HONORS COURSES**

Honors level courses are offered in English, language, mathematics, science and social studies courses. Qualified students may pursue honors courses in any or all disciplines.

Freshmen who score sufficiently high on the HSPT entrance exam and whose report cards indicate good study habits will be invited into honors courses.

Students in the honors level of a course must maintain a minimum semester average of C in order to qualify for honors placement the following year.

- A student who finishes first semester with C- or lower in an honors course may not register for the honors level for the following year.
- If the student shows marked improvement for second semester, the teacher may then invite the student to remain in honors for the following year.

### **ADVANCED PLACEMENT**

The Advanced Placement Program enables students to pursue college-level studies while still in high school. Based on their performance on the rigorous AP Examinations, students may earn college credit and advanced placement in college programs.

Students at Nazareth Academy successfully pass AP exams in each academic discipline. These include: Biology, Calculus AB and BC, Computer Science, English Language and Composition, English Literature and Composition, French Language, German Language, Spanish Language, Government, Physics B and C, and U.S. History. See prerequisites for individual courses.

All Nazareth Academy courses designated as AP have been approved by the College Board and are authorized to use the "AP" designation. This means that each of these courses meets or exceeds the expectations of colleges and universities for that course.

## **Progress Reports and Report Cards**

Report cards are mailed home quarterly. Progress reports are mailed home midway through each quarter and indicate grades in progress for each course.

Semester grades are an average of the two quarter grades (40% each) and the semester exam (20%). Credit is awarded each semester. Only semester grades and credits appear on a student's permanent record and college transcript.

### **Credits**

Students may take 6.0 – 7.0 credits each year. Students need to have earned 6.0 credits to begin sophomore year, 12.0 credits to begin junior year, and 18.0 credits to begin senior year. Students deficient in credits at the end of the school year must make up those credits in summer school to return to Nazareth Academy.

A student who receives 3 semester grades of F in one semester is asked to withdraw from Nazareth Academy.

### **Eligibility**

Notice of ineligibility is sent home with the progress report or quarter report card if a student has any combination of 2 F's or Incompletes. When incomplete grades become passing grades, only 2 F's will cause a student to remain ineligible until the next progress report or report card is issued.

### **Grading Scale**

Percent Equivalent			Quality Points	
			College prep	Honors and AP
A- (93-94%),	A (95-98%),	A+ (99-100%)	4	5
B- (85-86%),	B (87-90%),	B+ (91-92%)	3	4
C- (77-78%),	C (79-82%),	C+ (83-84%)	2	3
D- (70-71%),	D (72-74%),	D+ (75-76%)	1	2
F (0-69%)			0	0

### **Graduation Honors**

The valedictorian and salutatorian are named for the graduating class based on grades and credits in AP and Honors classes, giving the highest weight to the AP A+, then AP A, then Honors A+, then Honors A.

Cords are worn to indicate National Honor Society, foreign language honor societies, and Quill and Scroll.

### **Scheduling Classes**

Guidance counselors and teachers advise current students of course requirements and recommend courses appropriate for students' ability and educational goals. Parents receive a report of the student's course recommendations. The parent returns the

student's requested schedule, being mindful of prerequisites and recommendations. The course election sheet is to be signed by the parent or guardian and returned to the Guidance Office by the deadline. Course requests are honored if all prerequisites and department requirements have been satisfied and minimum enrollment for the course has been reached. To change a student's course requests after June 30 requires a \$30 course change fee.

### **Overview of Four-Year Schedule**

Students typically schedule six classes including the following:

#### Freshmen

Religion 1; Phys Ed (1 sem. each)  
English 1  
Choice of language  
Algebra 1 or Geometry  
Physics  
World History

#### Sophomores

P.E./Health; Religion 2 (1 sem. each)  
English 2  
Second year of language  
Geometry or Algebra 2  
Chemistry  
Fine Arts

#### Juniors

Religion 3  
American Lit or AP Eng Lang.  
Algebra 2 or Precalculus  
Language  
Biology  
U S History

#### Seniors

World Religions/Peace and Justice  
World Lit or AP Lit  
FST, Precalculus, or AP Calculus  
Language  
Environmental Science or AP Science  
Contemporary World Issues

*Options:* Fine Arts, Journalism, Creative Writing, Computer Programming, other Social Studies electives

### **Proficiency and Transfer Credits**

Eighth grade students who complete the equivalent of a full year of high school algebra or foreign language are invited to take a proficiency exam at Nazareth Academy in May. Upon successful completion of the exam, the student will earn one credit for that course.

Transfer credits are accepted from accredited schools for courses that are consistent with Nazareth's curriculum.

# ENGLISH

The English department promotes high standards of academic performance. Through its courses the department emphasizes the importance of writing effectively, having a command of good grammar, reading literature critically and appreciating a wide variety of genres, themes, authors, and ideas.

**ENGLISH 1 (9)** 2 sem. 1 credit

Students gain competence in writing skills and the ability to read critically the various genres such as mythology, poetry, short story, non-fiction, drama, and the novel. Emphasis is on grammar and vocabulary, note taking, paragraph and essay writing, and careful reading. The research paper is introduced second semester.

**ENGLISH 1 HONORS (9)** 2 sem. 1 credit

*Prerequisite: Invitation from the department*

Students gifted in reading and writing ability are challenged to read and write intensively with a focus on critical thinking. Areas of study are the short story, non-fiction, poetry, mythology, a Shakespearean play and novels. Vocabulary and grammar are stressed throughout the year, and the research paper is introduced.

**ENGLISH 2 (10)** 2 sem. 1 credit

This course combines critical reading with writing. Various works of fiction, nonfiction, poetry and contemporary or classic literature generate discussion, analysis, and writing activities. Students learn the steps in the writing process, from prewriting to final drafting, and write expository, descriptive, narrative, persuasive, and research projects while building vocabulary and grammar skills.

**ENGLISH 2 HONORS (10)** 2 sem. 1 credit

*Prerequisite: English 1 Honors or teacher recommendation*

This course is designed for serious, self-motivated students of language and literature. Vocabulary, grammar and syntax continue to be stressed. Students write frequently in the various discourses based on their close reading of short stories, poetry, novels and a Greek and Shakespearean tragedy. Students also research and write a formal research paper and a summary of critical sources.

**AMERICAN LITERATURE (11)** 2 sem. 1 credit

Students develop an understanding of American literature from indigenous and early European inhabitants to current times through novels, drama, poetry and essays. Students examine the influence of culture and history on literature and connect literature to the current culture. Writing experiences include literary analyses and a research paper, and in concert with other course activities they will continue to improve their grammar and expand their vocabulary and writing skills.

**AMERICAN LITERATURE HONORS (11)** 2 sem. 1 credit

*Prerequisite: English 2 Honors or teacher recommendation*

This course surveys American literature and literary movements and challenges serious students with long-range assignments and research projects. Students learn to analyze literature in terms of historical importance, cultural background, and literary significance. Projects are required each semester, with a research paper during the second semester. Students enrich their writing skills and prepare for SAT and ACT tests with vocabulary and grammar work.

**AP ENGLISH LANGUAGE & COMPOSITION (11)** 2 sem. 1 credit

*Prerequisite: English 2 Honors B average, 3.8 GPA, writing sample and teacher recommendation*

This course, leading to the AP exam, empowers students to read analytically, identifying and explaining an author's use of rhetorical strategies and techniques. Students learn to apply these varied techniques and strategies to their own writing. Texts come predominantly from non-fiction American literature, and writing tasks include response to and analysis of literary texts, expository and argumentative compositions and a synthetic research paper with attention to the process of writing.

**WORLD LITERATURE (12)** 2 sem. 1 credit

This course is a regional exploration of significant works from ancient to modern day. It includes extensive reading, discussion, and analysis of oral and written literature including poetry, narratives and drama and examines how these works remain relevant to students' experiences. The course will trace common themes and traditions and discuss universal human experiences that transcend culture.

**WORLD LITERATURE HONORS (12)** 2 sem. 1 credit

*Prerequisite: American Lit Honors or teacher recommendation*

Although the World Literature Honors course shares the same content and regional approach as the college prep level, the honors course differs in several respects. Teachers will cover the material in more depth and with a faster pace, assignments and projects will be more frequently assigned with expectations more rigorous in scope, and a greater emphasis will be placed on analytical writing.

**AP ENGLISH LITERATURE & COMPOSITION (12)** 2 sem. 1 credit

*Prerequisite: AP English Language or American Lit Honors, B average, 3.8 GPA, writing sample and teacher recommendation*

This course, leading to the AP exam, gives students the opportunity to explore how a writer's techniques contribute to the reader's enjoyment and understanding of the work. Students critically read and analyze classic and modern fiction, poetry, and drama that typically appear on the AP recommended reading list. They discuss and write about an author's style, structure, tone and theme as well as figures of speech, imagery, and symbols.

**JOURNALISM** (10,11,12)

1 sem. 0.5 credit

*Prerequisite: C or better in required English courses or instructor approval*

Journalism gives students a practical opportunity to practice writing clearly and accurately. Students study the news story, feature story, sports story, editorial, and entertainment review. There is focus on interviewing techniques, copy-editing, headline writing, layout and design, and journalism and the law.

**CREATIVE WRITING** (10,11,12)

1 sem. 0.5 credit

*Prerequisite: C or better in required English courses or instructor approval*

Creative Writing is for students with well-developed writing skills who want to explore poetry, fiction, and the personal narrative. Students must have an interest in writing and be motivated to work independently to complete multiple revisions of each assignment. Students' work is read and critiqued by other class members.

## FINE ARTS

The Fine Arts Department, composed of Art, Drama and Music, aims to develop an appreciation of the fine arts and a facility in the performance of these arts.

### ART

**INTRODUCTORY ART** (9,10,11,12)

1 sem. 0.5 credit

A foundation background of art history and appreciation is provided through slides, videos, and virtual museum tours. Simple projects using paint, cut paper, and graphite are created to explore color, line, value, shape, and texture. Museum visits, art website exploration, and independent study are optional offerings to assess learning. This course is required for entry into upper level art courses.

**TWO-DIMENSIONAL DESIGN** (10,11,12)

1 sem. 0.5 credit

*Prerequisite: Introductory Art*

This course explores the concepts of two-dimensional art forms. Design principles and their application are applied to studio problems in drawing, painting and printmaking.

**THREE-DIMENSIONAL DESIGN** (10,11,12)

1 sem. 0.5 credit

*Prerequisite: Introductory Art*

Ideas are formulated and visualized through the utilization of materials and techniques related to sculpture, clay work and fiber arts.

**PHOTOGRAPHY (11,12)**

1 sem. 0.5 credit

*Prerequisite: Introductory Art*

This is an introductory course with basic theory, darkroom procedures and picture taking. Students must have a 35mm camera with an adjustable shutter and diaphragm; automatic cameras must have manual override. Composition and color will also be explored using digital cameras and Photoshop. Photography is required of yearbook and newspaper photographers with no experience. Students purchase their own paper and film.

**STUDIO 1, 2, 3, 4 (11,12)**

1 sem. 0.5 credit

*Prerequisite: 2 semesters of art (B average) and consent of instructor*

Studio affords students an opportunity to synthesize the varying experiences and ideas encountered in foundation courses and to develop an emerging personal style. Students choose one medium to explore in depth, studying its history, the use and innovations of the medium by contemporary artists and the application of these findings to the student's work. Students purchase their own materials.

**D R A M A****SPEECH (9,10,11,12)**

1 sem. 0.5 credit

This course is designed for students who have not had any training in a formal speaking situation. It focuses on interpersonal communication skills, group discussion skills, speech organization and delivery. The emphasis of this course is on performance. This course is a prerequisite for Acting.

**INTRODUCTION TO THEATRE (10,11,12)**

1 sem. 0.5 credit

*Prerequisite: Speech*

This course is designed for students interested in studying play production and history of theatre and learning critical analysis of theatre productions. Students attend two plays during the semester. Discussion includes an overview of several eras of theatre, an evaluation of the plays and what makes a play "great."

**ACTING 1 (10,11,12)**

2 sem. 1 credit

*Prerequisite: Speech*

This course is designed for students interested in performing. Activities include pantomime, improvisations and character analysis. Final projects include scenes or one-act plays.

**ADVANCED ACTING (11,12)**

2 sem. 1 credit

*Prerequisite: Acting I and consent of instructor*

Designed for students interested in performing, this course focuses on student-written productions, one-act plays, a children's play first semester, and a student-directed one-act play second semester.

**ACTING 3 (12)**

2 sem. 1 credit

*Prerequisite: Advanced Acting and consent of instructor*

This course is designed for students interested in performing and directing, with a strong emphasis on student directing. Activities include directing Advanced Acting students in the children's play and one-acts.

**MUSIC****INTRODUCTION TO MUSIC (9, 10, 11, 12)**

1 sem. 0.5 credit

This class is about the composition of music, how it is performed, its aesthetics, and how music evolved. Students learn the basic elements of music such as melody, harmony, rhythm, and structure as well as the different historical periods of musical development through lecture and listening to musical examples.

**CONCERT BAND (9,10,11,12)**

2 sem. 1 credit

Concert Band is open to all band students with two years of experience on a concert band instrument. No audition is necessary. Students learn the basic concepts of instrumental music making. The literature level is intermediate to advanced high school level. Members participate in Marching Band in the fall and Pep Band in the winter. (Exception is made for varsity athletes in season.)

**WIND ENSEMBLE (10,11,12)**

2 sem. 1 credit

Enrollment in the Wind Ensemble is by audition only. The group learns advanced concepts of music through the highest level of musical literature. The music assigned is generally at a college or professional level. Members not in athletic season participate in Marching Band in the fall and Pep Band in the winter.

**CONCERT CHOIR (9,10,11,12)**

2 sem. 1 credit

The class includes a variety of vocal experience. Students are assessed at their current vocal level and encouraged to grow in beginning music theory, sight singing, general ensemble work in two- to four-part settings, tone and pitch quality, proper breathing techniques and an emphasis on blending one's voice among others. The repertoire includes but is not limited to classical, cultural, sacred and contemporary Christian, popular, holiday, and Broadway music. The Concert Choir also functions as the Liturgical Choir for the all-school liturgies. Each student in the Concert Choir is eligible to audition for our vocal jazz ensemble "Progressions." This ensemble is made up of ten to 12 voices that concentrate on a capella singing as well as other complex literature.

# FOREIGN LANGUAGES

The general objective of the Language Department is to accomplish the National Goals and Standards of foreign language learning in the following areas: communication, connections with other disciplines, comparisons with native language, understanding of culture, and use of language in the community, thus enhancing students' ability to function more effectively in the global community.

## FRENCH

**FRENCH 1** 2 sem. 1 credit

This course introduces the study of the French language and the culture of French-speaking people. Students learn basic grammar, pronunciation, reading, writing and elementary conversations through a variety of activities.

**FRENCH 2 and FRENCH 2 HONORS** 2 sem. 1 credit

*Prerequisite: French 1; teacher recommendation for honors*

In this course students continue to develop the fundamental skills of speaking, reading and writing French. The language is related to daily life through the study of light literature, current events and culture. In addition, honors students are required to take more comprehensive tests, and complete additional readings, proficiency projects, and reports.

**FRENCH 3 and FRENCH 3 HONORS** 2 sem. 1 credit

*Prerequisite: French 2 or French 2 Honors*

This course centers on an in-depth grammar study and extensive vocabulary development. Reading and self-expression are emphasized. A novel and several short stories are read and discussed. Honors students are required to take more comprehensive tests and complete additional readings, proficiency projects, and reports.

**FRENCH 4 HONORS** 2 sem. 1 credit

*Prerequisite: French 3 Honors or teacher recommendation*

This course is designed for serious students of the French language. Expression in oral and written language continues to be emphasized; the study of French literature and culture is continued. Some AP materials are included to prepare those students who are intending to take the AP exam. Those students also work independently and meet with the teacher outside of class time.

## **AP FRENCH**

2 sem. 1 credit

*Prerequisite: French 4 Honors or invitation by department*

This advanced class emphasizes skills in communicating including understanding French in various contexts; vocabulary for reading non-technical writings; and expressing oneself coherently, resourcefully, creatively, and with fluency and accuracy in both written and spoken French. Course content includes the arts, current events, literature, and sports. Materials used include audio and video recordings, films, newspapers and magazines, and practice tests for the AP exam.

## **ITALIAN**

### **ITALIAN 1**

2 sem. 1 credit

In Italian 1 students learn basic grammar and vocabulary. Students begin to develop fundamental skills of reading, writing, speaking and listening. Students are introduced to Italian geography and customs as well as to the contributions Italians and Italian-Americans have made to society. *Tutti Benvenuti!*

### **ITALIAN 2 and ITALIAN 2 HONORS**

2 sem. 1 credit

*Prerequisite: Italian 1*

Italian 2 and 2 Honors are a continuation of students' study of essential Italian grammar concepts and vocabulary. Listening and speaking skills are emphasized through the use of videos, DVDs, and CDs in Italian. Students further develop their reading and comprehension skills through short selections dealing with Italian culture, history, and a short chapter book in Italian.

### **ITALIAN 3 and ITALIAN 3 HONORS**

2 sem. 1 credit

*Prerequisite: Italian 2 or Italian 2 Honors*

This course continues to develop students' comprehension as well as their oral and written proficiency. The course includes further study of Italian history, culture, art, and film, and includes a trip to the Lyric Opera of Chicago to see an opera in Italian. Students realize their mastery of Italian by reading two short novellas in Italian, *Mi diverto con Gianluigi!* and Carlo Collodi's *Le Avventure di Pinocchio* and by viewing Italian films.

### **ITALIAN 4 and ITALIAN 4 HONORS**

2 sem. 1 credit

*Prerequisite: Italian 3 or Italian 3 Honors*

This course is designed for students who are motivated to increase their oral and written proficiencies through detailed review of Italian grammar and vocabulary. Grammar and vocabulary are reviewed by reading short stories and two short novellas in Italian as well as through oral and written text-based activities. The continued study of Italian history, literature, art, film, and cuisine will allow students to deepen their understanding of the Italian culture and people. An opportunity to see an Italian opera at the Lyric Opera of Chicago helps to increase student awareness of the contributions of Italians and Italian Americans to Western Civilization.

## SPANISH

### **SPANISH 1**

2 sem. 1 credit

This course introduces the student to the language and culture of native speakers in Spain and Latin America. Students learn pronunciation, basic grammar, and vocabulary, and begin to develop fundamental skills of reading, writing, listening, and speaking.

### **SPANISH 1 accelerated**

2 sem. 1 credit

The accelerated Spanish 1 course develops the same skills as the college prep class but moves at a faster pace. Additional supplementary material and AP preparation is introduced to challenge the student and prepare them for the honors Spanish classes.

### **SPANISH 2**

2 sem. 1 credit

*Prerequisite: Spanish 1*

Students study essential grammar concepts and vocabulary. Listening and speaking skills are emphasized through the use of dialogs, videos, and CDs. Students develop reading and comprehension skills through cultural articles related to everyday life.

### **SPANISH 2 HONORS**

2 sem. 1 credit

*Prerequisite: Spanish 1 accelerated and teacher recommendation*

Students study essential grammar concepts and vocabulary. Listening and speaking skills are emphasized with the use of videos and CDs. Students develop reading and comprehension skills through cultural articles related to everyday life. Spanish literature, art, and history are explored through a novel which encourages discussion.

### **SPANISH 3**

2 sem. 1 credit

*Prerequisite: Spanish 2*

Students develop grammatical concepts and acquire vocabulary necessary for written and oral self-expression. A short novel provides students with cultural insights, appreciation for literature, and opportunities for group discussions in Spanish.

### **SPANISH 3 HONORS**

2 sem. 1 credit

*Prerequisite: Spanish 2 Honors and teacher recommendation*

This course provides in-depth grammar study and extensive vocabulary development. Reading and self-expression are emphasized. Spanish history, literature, art, and culture are explored. Students read an unabridged novel which promotes and develops written and oral proficiency in Spanish.

## **SPANISH 4**

2 sem. 1 credit

*Prerequisite: Spanish 3*

With this course students will complete four years of language study to better fulfill college language requirements. The study of grammar is completed, and fluency in oral and written expression is emphasized through reading and discussion of selected literary works.

## **SPANISH 4 HONORS**

2 sem. 1 credit

*Prerequisite: Spanish 3 Honors and teacher recommendation*

This course is designed for serious students of the Spanish language. Fluency in oral and written expression is emphasized, and the study of Spanish and Latin American literature is continued. Students may be invited to take the Spanish Language AP exam.

## **AP SPANISH**

2 sem. 1 credit

*Prerequisite: Spanish 4 Honors and invitation by department*

This course is designed for serious students who are motivated to increase their oral and written proficiencies through detailed and intense review of Spanish grammar and specialized vocabulary, reading short stories and a play in Spanish, and oral and written text-based activities. The continued study of Spanish history, literature, and art will allow students to deepen their understanding of the Hispanic peoples.

# **M A T H E M A T I C S**

Mathematics is used in research in the physical sciences, social sciences, business and other practical applications. Our mathematics curriculum aims to prepare students for college admission, facilitate further study in mathematics and related fields, and develop interest in the structure and applications of mathematics.

## **ALGEBRA 1**

2 sem. 1 credit

Students learn to generalize arithmetic operations, to solve and graph equations and to apply algebra in problem solving. Emphasis is placed on developing reasoning skills, communicating mathematically and making connections between mathematics and other fields of study. Calculator use begins second semester.

## **ALGEBRA 1 HONORS**

2 sem. 1 credit

*Prerequisite: Invitation from the department*

This course covers the topics of Algebra I in greater depth, at a more accelerated pace, and requires independent work from the student.

## **GEOMETRY**

2 sem. 1 credit

*Prerequisite: Algebra 1*

Geometry enables students to connect the physical and visual world with algebra, to become independent thinkers and learners, and to strengthen their intuitive skills. Transformations, constructions, algebraic and geometric properties, deductive and inductive reasoning, geometric concepts with respect to the coordinate plane, and three-dimensional objects are some of the topics studied.

## **GEOMETRY HONORS**

2 sem. 1 credit

*Prerequisite: Algebra 1 Honors or teacher recommendation*

Geometry Honors considers the topics of Geometry in greater depth, considers more challenging problems and covers basic concepts at a faster pace. Formal geometric proof is included along with an introduction to probability.

## **ALGEBRA 2**

2 sem. 1 credit

*Prerequisite: Geometry*

Algebra 2 reinforces the concepts and skills of Algebra 1 and introduces the topics necessary for further study in mathematics. It includes a study of quadratic equations; polynomial functions; rational expressions; radicals; irrational numbers; graphs of linear, quadratic, exponential and logarithmic functions; and an introduction to statistics and trigonometry.

## **ALGEBRA 2/TRIGONOMETRY HONORS**

2 sem. 1 credit

*Prerequisite: Geometry Honors or teacher recommendation*

This is a transitional course linking the traditional high school mathematics courses (Algebra 1 and Geometry) and those requiring a higher level of mathematical thinking (Precalculus and Calculus.) The skills of Algebra 2 are covered along with an in-depth study of functions and an introduction to trigonometry. Emphasis is placed on the student becoming a problem-solver and an independent learner.

## **FUNCTIONS, STATISTICS AND TRIGONOMETRY**

2 sem. 1 credit

*Prerequisite: C or better in each semester of Algebra or teacher recommendation*

This course is recommended as a fourth year math course preparing students for college level math courses. It focuses on the study of various functions, statistics, and trigonometry with the aid of the graphing calculator and computer. The TI-83+ graphing calculator is required for this course.

## **PRECALCULUS HONORS**

2 sem. 1 credit

*Prerequisite: Algebra 2/Trig Honors*

This course is a preparation for the study of calculus and other college level math courses. The contents include the study of the behavior of the following functions: polynomial, rational, exponential, logarithmic, and trigonometric functions and their

application to real life situations. Additional topics include analytic geometry, systems of equations, and other advanced topics in algebra.

### **AP CALCULUS AB**

2 sem. 1 credit

*Prerequisite: Precalculus*

This college level Advanced Placement course covers the properties of limits, differentiation, integration, and their applications. A TI-89 graphing calculator is required. Students study calculus analytically, numerically, and graphically to prepare for the required AP Calculus AB exam.

### **AP CALCULUS BC**

2 sem. 1 credit

*Prerequisite: AP Calculus AB*

Calculus BC is a full year course in the calculus of functions in a single variable. It includes a review of topics covered in Calculus AB plus the following topics: parametric, polar and vector functions and the application of derivatives and integrals; logistic differential equations; polynomial approximations and infinite sequences and series. The TI-89 graphing calculator is required for this course.

### **COMPUTER SCIENCE 1**

2 sem. 1 credit

*Prerequisite: Algebra 1*

This course focuses on computer document creation and introductory computer programming concepts, including the structure of HTML and XHTML documents, design, good markup techniques and validation documents. Topics include text formatting, using lists, tables, an introduction to CSS and issues of Internet law. Students design web pages for usability and readability. Programming concepts are introduced using JavaScript web programming language, including basic programming concepts as they apply to using and writing JavaScript, with an emphasis on the application of these languages to mathematics.

### **AP COMPUTER SCIENCE**

2 sem. 1 credit

*Prerequisite: Geometry or consent of instructor*

In this course students become familiar with the principles of Java Programming. Through hands-on exercises, students explore Java language fundamentals as well as basic concepts of object-oriented programming. Topics include the study of classes, methods, inheritance, polymorphism, encapsulation, and the AP Computer Science Case Study. In addition students read, use and modify templated AP classes.

## **PHYSICAL EDUCATION**

In Physical Education students develop basic skills and physical fitness necessary to participate in a variety of conditioning exercises and sport activities. Success in skill performance is dependent upon the development of selected aspects of fitness. Continued maintenance of physical fitness is essential for good health and well-being. Physical education is required of freshmen and sophomores.

**PHYSICAL EDUCATION 1 (9)** 1 sem. 0.50 credit

This course gives students basic knowledge and skills in numerous team and individual sports. This course strives to promote confidence, leadership, and sportsmanship in athletic activities.

**PHYSICAL EDUCATION 2 (10)** 1 sem. 0.25 credit

Students will acquire the ability to perform more complex movement patterns in physical activities involving personal conditioning, team activities, and individual sports. Students will be able to participate in sports not covered in P E 1.

**HEALTH (10)** 1 sem. 0.25 credit

Health education addresses the principles of nutrition, alcohol, tobacco, drug use and abuse, and the prevention and treatment of diseases, including STD's. This course encourages students to reflect on themselves, their development, needs and capacities, persuading them to act in ways that will promote their optimum health.

## **PRACTICAL ARTS**

**COMPUTER APPLICATIONS WITH KEYBOARDING (10,11,12)**

1 sem. 0.5 credit

In this one-semester course students learn Cyberlink Power Director 8, Microsoft Word, Excel, PowerPoint, and Access as well as ergonomically correct computer skills. Students learn to create business letters, reports, tables, academic and professional résumés, slideshows, and produce a movie.

# RELIGION

The Religion Department is committed to educating students as mature Catholic Christians by emphasizing both faith development and understanding of Catholic teaching. Students are encouraged to recognize the unconditional love of God in an atmosphere in which questions can be asked, forgiveness experienced, faith shared and service encouraged. A Nazareth graduate should have a spiritual vision based on the teaching of Christ, with a commitment to serving others and building a just world “that all may be one.”

## **RELIGION 1 (9)**

1 sem. 0.5 credit

Since students come to Nazareth with a variety of religious backgrounds and experiences, this course introduces them to the fundamentals of Catholicism. Instruction is both academic and experiential to encourage students to be open to God’s gift of faith. The goal is to understand Catholic Christian beliefs and rituals as well as to integrate faith into daily life. The course teaches the four “pillars” described in the *Catechism of the Catholic Church*: Creed, Liturgy, Morality and Prayer. Students will understand our faith as sacramental, and realize that the sacraments are grounded in Jesus, in the church, and in the sacredness of God’s creation. Prayer and morality are presented in the context of Scripture, and students are encouraged to become involved in the Christian community. There is also a short unit on Christian values relating to sexuality.

## **CHURCH HISTORY (10)**

1 sem. 0.5 credit

This course is designed to help students come to an adult knowledge of their Catholic faith by learning the history of the Church. Beginning with Pentecost, the story of the Church is a story of sin and of God’s grace and the promise of Jesus to be with his Church until the end of time. Students see how this journey through history has shaped the Church today and reflect on their own role in it. In this chronological study there is an emphasis on Spirit-filled personalities who have guided the Church at key moments. There are opportunities for students to share faith as well as to voice their own questions and concerns. There is an emphasis on prayerful reflection about the daily choices students make, their growing awareness of their movement toward adulthood, and their own vocations to serve God in unique ways. A service project is a course requirement.

## **OLD TESTAMENT (11)**

1 sem. 0.5 credit

Students learn the Scriptures chronologically from Genesis through the prophets. They study the Torah, including the stories of creation and sin, the redemption begun through the patriarchs, the exodus story and the covenant. They reflect on the nature of God and the meaning of faith when reading and discussing the accounts in Joshua and Judges and the dramatic stories of the kings of Israel. They also study the wisdom literature and the challenging words of the prophets. There are three levels of presentation: informational, in which students study and discuss content as well as context; formational, in which students process information for its meaning and

values; and transformational, in which students reflect on the faith implications of the readings and participate in activities which invite a faith response. A service project is a course requirement.

### **NEW TESTAMENT (11)**

1 sem. 0.5 credit

This course introduces students to the Gospels, the Acts of the Apostles, the Letters, and the Book of Revelation. The emphasis in the course is on the Good News of Jesus Christ: students learn that the four Gospels are testimonies of faith, and they study the parallels and differences found in the four accounts. There are opportunities to pray with Scripture and to discuss the readings as the basis for Christian spirituality and Christian living. Frequent connections are made with the Old Testament, since the New Testament can only be understood in the light of the Old Testament. This course stresses information, knowing the content in the light of the context; formation, understanding the values of Jesus which are the basis for Christian values; and transformation, inviting students to make a faith response. There is a required overnight retreat.

### **WORLD RELIGIONS (12)**

1 sem. 0.5 credit

This course aims at achieving an understanding of the global village through a study of religious beliefs. The course begins with the recognition that all religious traditions begin with the mystery of human existence and attempt to respond to humankind's deepest questions about life and death, offering a meaningful way to live and die. Students will see elements that all religions have in common and will be able to appreciate the perspective of those who hold religious traditions that differ from their own. The various religions studied will include primal religious traditions, Judaism, the different sects of Christianity, Islam, and South Asian and Eastern religions including Hinduism, Buddhism, Taoism.

### **PEACE AND JUSTICE (12)**

1 sem. 0.5 credit

This course calls on students to realize that as members of the Church, they have a responsibility to continue the work of Christ and to build the "City of God" in today's world. The social justice principles taught by the Church are discussed and applied to contemporary issues in the world. Church members today who work toward a just society are highlighted, and students are challenged to see that following Jesus requires that we become instruments of peace and justice. Some issues examined are poverty, homelessness, violence, ecology and reverence for life. There are a variety of resources and experiences including movies, speakers, current news articles, and values-clarification activities. Students experience a day of service to the poor with faculty members leading groups to a variety of ministries in the Chicago area. An overnight three-day Kairos retreat is an option.

# SCIENCE

The Science Department objectives are to build a foundation for students to understanding the basic concepts of science and its mode of inquiry; to think systematically and creatively and to use abstractions; to recognize that science presents a way to think about and act on human and global concerns, e.g. pollution, use of energy and natural resources, agriculture; and to develop a sense of wonder and appreciation of the interrelatedness of all creation and live in harmony within it.

## **PHYSICS** (9,10) 2 sem. 1 credit

Fundamental physics concepts such as motion, forces, work, energy, waves, sound, optics, electricity and magnetism are studied. These concepts are studied with some mathematical problem solving utilized to reinforce and apply the concepts. The mathematical skills are reviewed and taught as needed. Extensive laboratory work supplements the classroom phase of the course and shows the application of the concepts to experimental situations.

## **PHYSICS HONORS** (9,10) 2 sem. 1 credit

*Prerequisite: Invitation from the department*

The fundamental concepts of physics such as motion, forces, work, energy, waves, sound, optics, electricity and magnetism are studied. Mathematical and reasoning expectations for this course are those of an “honors” course with a working knowledge of algebra prerequisite for enrollment. Extensive laboratory work supplements the classroom phase of the course and shows the application of the concepts to experimental situations.

## **CHEMISTRY** (10,11) 2 sem. 1 credit

Chemistry is the study of matter and its interactions. In this first year high school chemistry course students will learn to explain physical phenomena at the atomic level. A considerable amount of time is spent in a laboratory setting observing and interpreting data. Algebra is utilized for the analysis and application of chemical concepts.

## **CHEMISTRY HONORS** (10,11) 2 sem. 1 credit

*Prerequisite: Physics Honors*

This is a rigorous course that deals with the substances that make up the universe. It also deals with the changes that take place in these substances and more importantly with the processes by which these changes take place. Extensive laboratory work enables the student to become practiced in making observations, weighing facts and framing valid conclusions. A reasonable facility in algebra is required.

## **BIOLOGY** (11,12) 2 sem. 1 credit

Biology is the study of living things. Students study the underlying principles applicable to life at molecular, cellular, organismal and community levels. Structure

and function, interdependence and interaction of levels, and response to change are emphasized. Through observation, experimentation and simulations students grow in understanding the process of science and its application including biotechnology.

**BIOLOGY HONORS (11,12)** 2 sem. 1 credit

*Prerequisite: Chemistry Honors*

This course is for serious and capable students who want to study the topics presented in Biology in greater depth and detail. Independent study and extensive laboratory investigations are required.

**ENVIRONMENTAL SCIENCE (12)** 2 sem. 1 credit

*Prerequisite: completion of Biology or Biology Honors*

This class is designed as a fourth year lab science course. This lecture, lab, and project-based interdisciplinary course includes basic principles of earth science, physics, chemistry, and biology. Topic selection is based on major themes of modern environmental sciences; including humans and sustainability, science and ecological principles, sustaining biodiversity and natural resources, and sustaining environmental quality and human societies. Students will gain an awareness of the importance of Earth's systems in sustaining our daily lives, plus the scientific foundation and tools needed to apply critical thought to contemporary environmental issues.

**AP BIOLOGY (12)** 2 sem. 1 credit

*Prerequisite: Completion of Biology and department approval*

The Advanced Placement Biology course is designed to be the equivalent of a two-semester college introductory biology course. This fast-paced and rigorous course includes biochemistry, cell biology, genetics, diversity of life, ecology, and animal and plant structure and function. The primary emphasis is on developing an understanding of concepts rather than on memorizing terms and technical details. College-level laboratory materials are used to develop the student's analytical and research skills. The AP exam is offered to students.

**AP PHYSICS B (12)** 2 sem. 1 credit

*Prerequisite: Completion of Biology, or with department approval takes AP Physics B concurrent with the third year of science*

This Advanced Placement course provides college level physics for the capable student and is designed for those students considering pursuing any of the following career paths: engineering, physical sciences, or mathematics. The Physics B course, requiring knowledge of algebra and basic trigonometry, includes topics in both classical and modern physics taught at a first year college level. Topics include Newtonian mechanics (motion, forces, work, power, energy, momentum), fluid mechanics, thermal physics, electricity and magnetism, waves, optics, and atomic and nuclear physics. The AP exam is offered to students.

# SOCIAL STUDIES

The Social Studies Department encourages development of individual interests and abilities in order to stimulate a sense of self-motivation and self-direction within students. The Social Studies program assists students in analyzing and evaluating the values and institutions of our society. In addition it provides opportunities to gain factual and perceptual knowledge about other cultures and eras as a means of establishing greater understanding and tolerance among peoples and a broadened sense of society's accomplishments.

## **WESTERN CIVILIZATION (9)** 2 sem. 1 credit

From the foundations of Western Civilization in the Ancient World to Global Conflict, Cold War and New Directions in the 20th and 21st centuries this class will explore a chronological survey of Western Civilization. Students acquire a basis of understanding how Western Culture evolved and their place in it. Students will use library and computer resources for projects.

## **WESTERN CIVILIZATION HONORS (9)** 2 sem. 1 credit

*Prerequisite: Invitation from the department*

This course covers the topics of Western Civilization with special emphasis on analytical thinking and on understanding cause and effect relationships. Outside reading and a research project are required. Students participate in group discussions and give oral reports.

## **U. S. HISTORY (11)** 2 sem. 1 credit

In this course students learn how Americans have faced social, political, economic and international events of the past. Students are exposed to a wide variety of historical evidence including primary source documents, political cartoons, film and music. Students complete both written and oral projects as well as individual and group projects. Students must pass the U. S. and Illinois Constitution Tests.

## **U. S. HISTORY HONORS (11)** 2 sem. 1 credit

This course takes an in-depth look at the events, people and ideas that have shaped American history. In addition to daily assignments based on the textbook, reading from a variety of both primary and secondary sources is required. Strong writing skills are essential, as the students are required to write often. Participation in the Chicago Metro History Fair is required. Students must pass the U. S. and Illinois Constitution Tests.

## **AP U. S. HISTORY (11)** 2 sem. 1 credit

*Prerequisite: AP teacher recommendation*

AP U.S. History is a demanding course equivalent to a freshman college course and can earn students college credit. It is a survey of American history from the Age of Exploration to the present. Exemplary reading and writing skills and a willingness to

devote considerable time to homework and study are necessary. Emphasis is on critical and evaluative thinking skills; essay writing, both free and document based; and interpretation of original documents including maps, statistical tables and pictorial evidence of historic events. Students must pass the U. S. and Illinois Constitution Tests.

**ECONOMICS (12)** 1 sem. 0.5 credit

Economics helps students interested in business, politics or law to understand how the economy works. It includes such topics as factors of production, corporations, the stock market, inflation, taxes, prices and competition among companies. This course gives the responsible citizen a background in the problems and processes of the American economic system. Students learn how the economy affects them personally through critical examination of credit and marketing techniques. Projects dealing with entrepreneurship, investing and marketing are required.

**PSYCHOLOGY (12)** 1 sem. 0.5 credit

Psychology is the scientific study of behavior. Beginning with the early history of psychology, students explore such topics as research methods, intelligence, learning and memory, sleep, dreams, gender differences and psychological disorders. In addition to covering a wide variety of topics, this course also gives insight to the many career opportunities available in psychology today. Students are expected to participate in large group discussions. Some activities included are group projects, a behavior experiment, and a sleep and dream journal.

**AMERICAN GOVERNMENT (12)** 1 sem. 0.5 credit

This in-depth view of the workings of the American government is presented in two parts: theory and institutions of the government, and politics and government. In the first part students review the principles upon which the republic was founded, studying the constitutional framework that forms our political tradition. The second part examines the three branches of government. Extensive study of current events illustrates the theories and concepts studied. A variety of quarterly projects are assigned.

**CONTEMPORARY WORLD ISSUES (12)** 2 sem. 1 credit

This course is a regional exploration of the contemporary world and the important issues it faces. Students will be introduced to some of the great international and global forces influencing the 21st century. These include: the effect of geography on economic development; culture and its effects on history, politics, economics; global environmental concerns; and nationalism and identity. This course is intended to give students a solid historical and geographical background for understanding important forces shaping today's world.

**CONTEMPORARY WORLD ISSUES HONORS (12)** 2 sem. 1 credit

*Prerequisite: U.S. History Honors or teacher recommendation*

Although the honors course shares the same content and approach as the college prep level, this course differs in several respects. Students will learn the material in more

depth and at a faster pace, assignments and projects will be more frequent with expectations more rigorous in scope, and a greater emphasis will be placed on analytical writing.