

AMERICAN NICARAGUAN SCHOOL CONNECTING THE GLOBAL COMMUNITY



Course Handbook 2016-2017

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ANS Diploma

These are the requirements for an ANS High School Diploma.

English- 4 credits

Spanish
4 credits

Science- 4credits Social Studies- 4 credits

Mathematics-4 credits Physical Education- 2 credits Fine Arts (Art, Drama, or Music) .5 credit Electives - 6.5 credits

Electives are classes used to enhance and enrich the educational experience at ANS. Students are allowed to select from a wide variety of electives to fulfill this requirement for graduation.

- 1 credit will be issued for a yearlong course.
- 0.5 credit will be issued for a semester course.

Students must receive a passing grade (D-, 60%) in order to receive credit.

Students who fail three or more full-year core courses during a given school year automatically fail and must repeat the school year if they choose to enroll at ANS for the following school year. They are not entitled to take remedial courses and/or for-credit exams.

Students who fail less than three courses will be required to remediate the course(s) by attending summer school and taking a for-credit exam(s) prior to the start of the following academic year. For some courses, the Principal may approve projects, private tutoring, and/or online courses. A student who passes the for-credit exam will receive a maximum grade of 60 for the course.

A student who does not take or does not pass the for-credit exam in two separate courses must repeat the year if he/she chooses to remain at ANS.

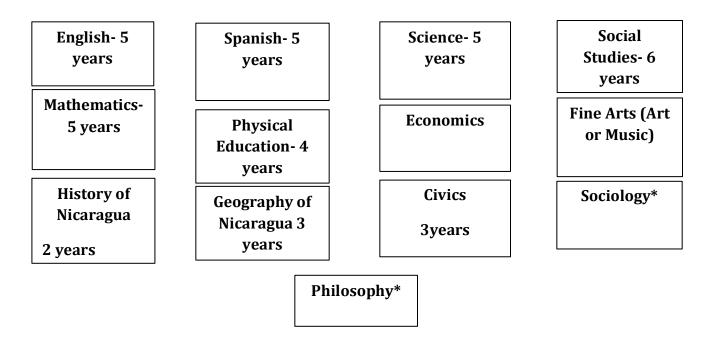
Note that electives courses that are listed in this course handbook may not be available every semester.

The following are requirements for the Bachillerato Diploma, however the American Nicaraguan School has other requirements for Language and Math.

Nicaraguan Bachillerato

A student has to have taken these classes from 7-12th grade to receive the Nicaraguan Bachillerato.

A student cannot obtain the Bachillerato with a failed class on their transcript - a student will take a For-Credit Exam.



*Offered as a summer option at ANS

Global Studies

These are the requirements for completion of the Global Studies Academy Certificate.

Global Studies	Exploration of Global Religions	Environmental Science	French or Chinese (HS)	Sociology
Upper Level Fine Art	AP Comparative Politics & Government	AP Human Geography	Philosophy	World Film

- Students must declare their interest in pursuing the Global Studies Academy Certificate by the beginning of their junior year in high school.
- Students must meet all of the regular requirements for graduation from ANS.
- Students must have a GPA of 3.0 or higher in order to receive the certificate upon graduation from ANS.
- Students must complete *A Community Capstone Project* prior to graduation.
- Students must participate in at least one international travel experience organized by ANS.
 - o Participation in HACIA Democracy, Model United Nations, International Negotiations Project (INP), Global Issues Network (GIN), or a summer global travel experience organized by ANS satisfies this component of the certificate.
- Students are required to take five courses from the following list.

Introduction to Global Studies*

World Religions

Environmental Science

Philosophy or Sociology

French I or Chinese I

World Film

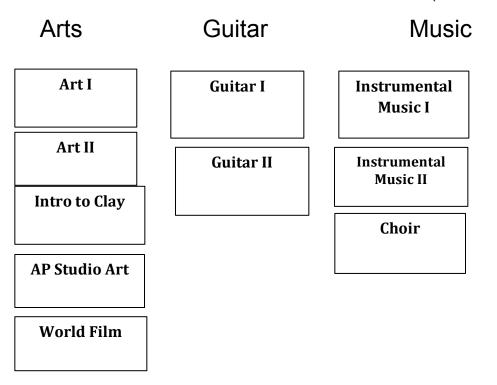
AP Comparative Politics & Government**

AP Human Geography**

- All students in the program are required to take Global Studies.
- ** All students in the program are required to take either AP Comparative Politics & Government OR AP Human Geography.

Arts

A student needs one semester of Fine Arts (music or art)



Art 1 (0011) - 1 credit 9-12th grade Prerequisite: None

We begin Art I focusing on drawing skills. Because students enter the class with a broad range of abilities, each student is encouraged to build on what he or she already knows. We also explore color theory, composition, abstraction, collage and other contemporary art practices. Throughout the semester time is dedicated to making art intuitively and building creativity.

Art II (0010) - 1 credit 9-12th grade *Prerequisite: Art I*

Art II is a continuation of Art 1 with greater emphasis on fundamental skills while moving toward an exploration of developing an individual concept.

Intro to Clay (0006) - 0.5 credit 9-12th grade

Students will explore different ways of sculpting and building with locally harvested clay. Students study ancient and contemporary traditions and explore

a variety of surface decoration techniques.

AP Studio Art (0005) - 1 credit

11-12th **grade** *Prerequisite: Art II* & *teacher recommendation*

Studio Art is for students with significant interest in art, particularly those who wish to pursue an art related career. Art 1 and Art 2 are a prerequisite for taking Studio Art. In this class, we explore drawing, painting, sculpture, collage, printmaking, photography, and video as a vehicle of expression and communication. Although it is not an art history class, students do learn art history in order to understand art in the broader historical context. Emphasis is placed on studying contemporary art and postmodern art making practices.

World Film (0039) - 0.5 credit

9-12th grade Prerequisites: None

This course explores some of the past and current influences of motion pictures on cultures and societies all over the world. The focus for the quarter will be on specific works from countries such as South Africa, Denmark, India, Japan and more. Students will study comedies, dramas and musicals, analyzing acting, directing and editing styles as they vary from country to country, as well as exploring the effects of movies on those societies and whether they have had an impact on other societies. The class will consist largely of Foreign Film Analyses, plus lectures, discussions, classwork, quizzes and homework assignments

Music (Instrumental Music & Guitar)

Instrumental Music I (0029)) - 1 credit

8-10th grade Prerequisites: Able to play a musical instrument

In this introductory course students learn the skills necessary to play a wind instrument. These instruments are supplied by the school. The course includes individual and group playing and students will also develop basic skills on the piano and snare drum.

Instrumental Music II (0017)) - 1 credit

This course is for students who have completed Instrumental Music

1. Students will further develop their performance skills and learn more about composing and arranging music using the piano.

Vocal Music (0420) (Taught in Spanish) - 0.5 credit 8-12th grade *Prerequisites: None*

Students will experience singing in a group setting. Skills covered include breathing, vowel and consonant sounds, solfege singing, rhythm reading, part singing and blending voices. This is not a performance ensemble and students taking this class will not be required to sing in front of others

besides those in the class. Experienced and inexperienced singers are welcome.

Guitar I (0028) - 0.5 credits 8-12th grade *Prerequisites: None*

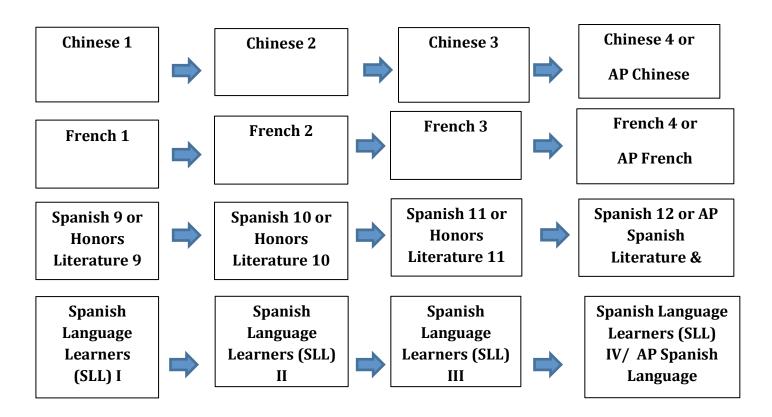
This is an introductory course aimed at developing skills necessary to play different kinds of music on the instrument. Students also learn different notation systems, a little music theory and get a taste of composition. By the end of this course, students will have the skills and knowledge necessary to play a variety of songs, and to use the many resources available to them to learn songs they choose on their own.

Guitar II (0021) - 0.5 credit

9-12th grade Prerequisite: Completion of Guitar 1 or teacher recommendation.

The focus of the course is playing different styles of music, and students get a taste of rock, blues, flamenco, bossa nova, classical and folk music. Many assignments have a group performance element. In addition, they learn more advanced chords, scales and techniques and experiment with composition and recording. Students are involved in choosing the content of the course and are expected to work and play at a higher standard.

Foreign Languages



CHINESE

Chinese I (0051) - 1 credit

7-11thgrade Prerequisite: None

This class begins learning the pinyin system, as students master 350 words for listening and speaking and over 170 characters for reading and 100 characters for writing. Students will be able to use simple sentences and ask questions.

Chinese II (0052) - 1 credit

8-12thgrade Prerequisites: Chinese I

This class learns more than 360 basic words for listening and speaking, and about two-thirds of the oral language vocabulary for reading and half of it for writing, adjustable depending upon the students' learning pace. They continue learning more basic sentences and questions.

Chinese III (0053) - 1 credit

9-12th grade Prerequisites: Chinese II

Students will continue expanding their Chinese by 600 words and 137 grammatical sentences. The course content focuses on campus activities and daily life and situational dialogue practice. Students will do essay writing practice.

Chinese IV (0054 - 1 credit

9-12th grade Prerequisites: Chinese III

Students will continue expanding their Chinese by 600 words for listening and speaking. They will also have a simple understanding of Chinese culture, including social, historical, and geographical. They will use situational dialogue practice and essay writing practice.

AP Chinese (0055) - 1 credit

9-12th grade Prerequisites: Chinese III

In AP Chinese, students will add 625 words and 119 grammatical sentence to their repertoire. They will also have a thorough understanding of Chinese culture, including social, historical, geographical, ways of the world. They will use situational dialogue practice and essay writing practice.

FRENCH

French I (0060) - 1 credit

7-12th grade Prerequisite: None

This is the Beginner level students learn how say things about themselves, what they like and dislike, family, friends and school. They also learn how to order food in a restaurant. FRENCH 1 is the level for survival. Students work on four competences: verbal and written expression and comprehension. The materials we use are the Bien Dit! Level 1 and authentic documents like poems, songs and video. Students also participate in Francophonie Celebrations in March.

French II (0061) - 1 credit

8-12th grade Prerequisite: Completion of French I

In this level students are able to better apply and deepen what they have learned in level 1. They are encouraged to have conversations about what they do, what they have done and what they will do; in different verb tenses. In level 2 we continue to work in the 4 competences, with a larger focus on verbal expression. Students participate in Francophonie Celebrations in March. The materials we use are the Bien Dit! Level 2 and authentic documents like poems, songs, video and short novels.

French III (0062) - 1 credit

9-12th grade Prerequisite: Completion of French II

Students learn to talk about abstract concepts like love and friendship and to tell anecdotes about everyday life. They read and write short stories. They read and write original short stories. They also have debates about current events and the news. Students participate in Francophonie Celebrations in March.

French IV (0064) - 1 credit

9th-12th grade Prerequisite: Completion of French III

Students learn to talk about abstract concepts like love and friendship and to tell anecdotes about everyday life. They read and write short stories. They read and write original short stories. They also have debates about current events and the news. Students participate in Francophonie Celebrations in March.

AP French Language (0063) - 1 credit

9-12th grade Prerequisite: Completion of French III

The minimum requirement for this level is 80% in FRENCH 3 or a B-1 level in DELF-DALF standards. In this level students consolidate their knowledge of French. They are able to argue and debate, write essays and understand authentic documents like radio shows and French movies, newspaper articles and

SPANISH

Spanish 9 (0070), Honors Spanish 9 (0075) - 1 credit

9th grade Prerequisite: Fluency in Spanish or Placement Test

In this class we explore, analyze and learn about Spanish medieval literature. We develop and work on writing, reading and speaking skills while we look at literature in a historical context.

Spanish 10 (0071), Honors Spanish 10 (0076) - 1 credit

10th grade Prerequisite: Spanish 9 or Placement Test

The 10th Grade Spanish course is designed in a way that students may develop and put into practice the four fundamental areas of the language: **Read**, **write**, **speak**, **listen**. This course combines theory with practice with exercises

covering different aspects will be practiced in the classroom. Readings covering the different literary periods/movements in Spain will be analyzed, as well as other works of current interest.

Spanish 11 (0072) Honors Spanish 11 (0077) - 1 credit 11th grade *Prerequisite: Spanish 10 or Placement Test*

To learn and deeply analyze some of the most significant literary expressions of pre-Columbus America, the Conquest (XVI and XVII centuries), and the literary movements that occurred up to the XIX Century. Students will identify the contributions and characteristics of these literary movements in relation to the cultural identity and role of America in them.

Spanish 12 (0073) - 1 credit

12th grade Prerequisite: Spanish 11 or Placement Test

Spanish 12 is a two-semester program taught in Spanish – Literature of XX Century Hispanic America, and Nicaraguan Literature.

AP Spanish Literature & Culture (0074) - 1 credit

12th **grade** *Prerequisite: B* or higher in SPANISH 11 and teacher recommendation.

This is a two-semester introductory course which will study the different literary movements, authors, and literary works written in Spanish of Spain, Latin America and the United States. Encourages interest in interdisciplinary study and cultural and historical relations of the different global contexts.

SPANISH LANGUAGE LEARNERS (SLL)

Spanish Language Learners I (0080) - 1 credit

9-12th grade Prerequisite: No prior Spanish

This course will help students to initiate in the Spanish language by learning vocabulary lessons and acquiring functional language. This gives the SLL beginners the tools they need in order to survive in a speaking Spanish country.

Spanish Language Learners II (0081) - 1 credit

9-12th grade Prerequisite: SLL I or teacher recommendation.

The purpose of this course is to work in developing the four basic skills of the language as well as enhance the students' performance through a communicative approach and a solid foundation in grammar and vocabulary.

Spanish Language Learners III (0082) - 1 credit

9-12th grade Prerequisite: SLL II or teacher recommendation.

The purpose of this course is to continue to work in developing the four basic skills of the Spanish language as well as enhance the students' language performance in and outside the classroom. This level emphasizes the use of proper grammar structures and writing styles.

Spanish Language Learners IV (0083) - 1 credit

9-12th **grade** *Prerequisite: SLL III or teacher recommendation.*

This course aims to reinforce skills and basic skills. Continue to develop understanding and critical thinking through reading Latin American authors. Creates an interest in culture and literary studies.

AP Spanish Language (0084) - 1 credit

9-12th **grade** *Prerequisite: SLL III or IV or teacher recommendation.*

This course intends to help students pursue a college-level of reading comprehension, writing, and listening and speaking skills in Spanish. Upon the completion of this course, students have to take the corresponding AP examination that is administered in May.

Global Studies Courses

A student has to have Global Studies and AP US Comparative or AP Human Geography, and three other classes of their choice in order to receive the Global Studies Certificate.

Global Studies	Exploration of Global Religions	Environmental Science	French or Chinese (HS)
Art	AP Comparative Politics & Government	AP Human Geography	Philosophy
World Film			Sociology

AP Comparative Government (APCG) (0308) - 1 credit

11-12th **grade** *Prerequisite: Teacher recommendation, test scores, and a B or higher in previous history class.*

APCG is offered to all high school juniors & seniors, who have successfully completed both a standard Civics and preferably US History class. APCG is a course that covers with in-depth analysis the "AP 6" core countries UK, Russia, China, Iran, Mexico, and Nigeria. To this backdrop is added an emphasis on world societal issues, particularly the change-developments over time, as well as the "thematic focus" on Sovereignty, Authority, and Power; Political Institutions; Citizens, Society, and the State; Political and Economic Change; Public Policy. APCG is a challenging college-level introductory course in preparation for the AP exam.

AP Human Geography (0307) - 1 credit

10-12th grade Prerequisite: Teacher recommendation and B or higher in previous history class.

In this course we will study a systematic approach of human geography to understand the use of spatial concepts and landscape analysis to examine human organization of space and the spatial relationships at different scales ranging from the local to the global. We will develop the ability to interpret maps, data sets, and geographic models using atlases, graphs, and charts.

Environmental Science (0255) - 1 credit

9-12th grade Prerequisites: None

The purpose of this course is for the student to gain a global perspective for environmental issues that our world faces today. Environmental Science will be exploring these issues and the search for solutions. The class will be focusing on 8 environmental issues that are decided by each student. The teacher will take into consideration the students' preferences on which issues to incorporate into the curriculum. The issues that might be explored are, but not limited to; human population, biodiversity and conservation biology, urbanization, environmental health and toxicology, freshwater resources and sustainability.

Global Studies (0309) - 0.5 credit

9-12th grade Prerequisites: None

Required for the Global Studies Certificate, this class introduces students to globalization, the interconnections among people and places as a result of this phenomenon and various challenges within each thematic area. Topics include: processes of globalization, indicators of economic and social development, sustainable development issues, global and geo-politics, cultural integration/coherence and diversity.

Philosophy (0314) - 0.5 credit

10-12th grade Preference given to seniority.

This class examines, what has largely been considered, the most fundamental questions of human existence. Relying on our rational and logical skills, we will study what many philosophers believe to be the answers to these deeply puzzling issues.

Sociology (0313) - 0.5 credit

9-12th grade Prerequisites: None

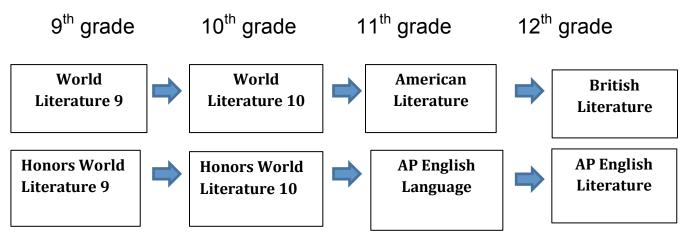
Sociology is the scientific study of human interaction and human group behavior in modern societies. This course covers the following concepts which are basic to sociology: (1)culture and social structure (2) the individual in society, (3)social inequality, (4)social institutions, and (5) changing social world, as related to sociology.

World Film (0039) - 0.5 credit 9-12th grade *Prerequisites: None*

This course explores some of the past and current influences of motion pictures on cultures and societies all over the world. The focus for the quarter will be on specific works from countries such as South Africa, Denmark, India, Japan and more. Students will study comedies, dramas and musicals, analyzing acting, directing and editing styles as they vary from country to country, as well as exploring the effects of movies on those societies and whether they have had an impact on other societies. The class will consist largely of Foreign Film Analyses, plus lectures, discussions, class work, quizzes and homework assignments.

Language Arts

A student has to have a minimum of 4 years of Language Arts.



9th World Literature (0100)) - 1 credit 9th grade Prerequisite: 8th grade English

Students will explore literature from different cultures and eras, identifying the many factors that affect the final product and reader. Students will consider literary works in relation to their own lives and experience. Students must demonstrate mastery of grammar and usage and will develop their written and spoken vocabularies. Summer readings are required.

9th Honors World Literature (0120)) - 1 credit 9th grade Prerequisite: B or higher in 8th grade English and teacher recommendation.

Honors English is a program designed to engage students in active, high-level learning, thereby ensuring that every student develops the skills, habits of mind, and concepts they need to succeed in high school, AP courses, and in college. Students will explore literature from different cultures and eras, identifying the many factors that affect the final product and reader. Students will consider literary works in relation to their own lives and experience. Students must demonstrate mastery of grammar and usage and will develop their written and spoken vocabularies. Summer readings are required.

10th World Literature (0101)) - 1 credit 10th grade Prerequisite: 9th grade World Literature

This course has a variety of texts from around the world – from William Golding's *Lord of the Flies* to Alexander Dumas' *The Count of Monte Cristo*. Students are expected to interpret, analyze, evaluate and critique these texts to show their understanding of the literature. Assessments for this class include essays, tests, quizzes, homework/classwork, and projects/presentations.

10th Honors World Literature (0121)) - 1 credit

10th **grade** Prerequisite: B or higher in 9th grade English and teacher recommendation.

This class will include a variety of texts from around the world – from William Golding's *Lord of the Flies* to Alexandre Dumas' *The Count of Monte Cristo*. Students are expected to interpret, analyze, evaluate and critique these texts to show their understanding of the literature. Students are expected to do more in-depth analysis of texts and complete more writing tasks than regular English 10. Assessments for this class include essays, tests, quizzes, homework/classwork, and projects/presentations.

American Literature (0102)) - 1 credit 11th grade *Prerequisite:* 10th grade English

In this course, we will read, discuss, analyze, and write about a wide variety of texts, primarily by authors from the United States. As we read, we will consider the following questions: How do pressures of conformity and non-conformity affect our lives? How do one's race, ethnicity, gender, income level, and/or sexuality affect one's image and self-perception as American? For whom is the American Dream a reality and for whom is it a myth? The major novels covered in this course are: The Crucible (Arthur Miller); The Great Gatsby (F. Scott Fitzgerald); Catcher in the Rye (J.D. Salinger); The Joy Luck Club (Amy Tan). In addition, we will read and analyze a variety of poetry, short stories, song lyrics, and non-fiction selections.

AP English Language and Composition (0122)) - 1 credit

11th **grade** Prerequisite: Honors World Literature with a B or higher and teacher recommendation

This English course is designed to engage students in the careful reading and critical analysis of a variety of predominantly non-fiction writings. A primary goal is for the student to have a clear understanding of the author's purpose, audience, and linguistic and rhetorical choices. The course is centered on rhetoric – the art of constructing and presenting arguments in writing. Besides frequent informal and formal writing assignments, students should also expect to be challenged to examine and apply language strategies through small and large group discussions, activities, presentations, and debates.

British Literature (0103)) - 1 credit 12th grade Prerequisite: 11th grade English

This course is a study of British literature from the Anglo-Saxon era to modern times in a variety of genres including poetry, short stories, novels and plays. Students are required to approach studies in a more analytical manner in preparation for college. Writing practices include the reflective or "college" essay, the cause and effect essay and expound upon several upper-level literary analysis skills.

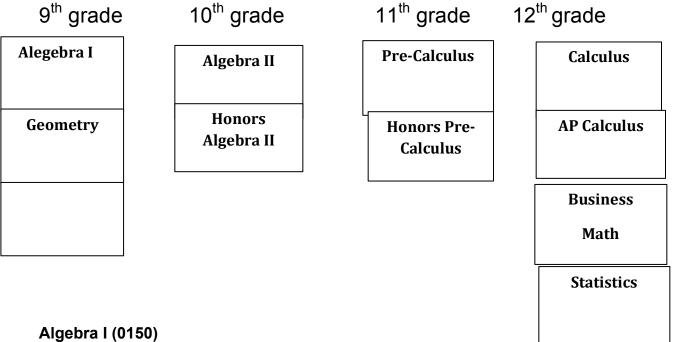
AP English Literature (0123)) - 1 credit

12th **grade** Prerequisite: AP English Language or American Literature with a B or higher and teacher recommendation

This course will follow the curricular requirements outlined by the College Board in the AP English Literature and Composition Course Description which focuses on building the skills necessary for college-level reading, writing, critical and analytical thinking. Aside from an extensive study of Perrine's Literature: Structure, Sound, and Sense, materials will include works from a variety of time periods and genres, and writing assignments will include in-class essays as well as formal process essays with several opportunities for revision. This is considered a college-level course, meaning students will be asked to read and analyze challenging, provocative, dense and sometimes controversial material. Students will also be expected to come prepared to challenge themselves and others with interesting discussion points on a regular basis.

Mathematics

A student has to have 4 years of Math to graduate and a minimum of Pre-Calculus.



Algebra I (0150) 9th grade - 1 credit

This course is designed to strengthen a student's math skills, and prepare them for **higher level** mathematics for their upper grades. There will be more in-depth and comprehension as the pace can go slower for all students to be successful. In particular, the instructional program in this course provides for the use of algebraic skills with a heavy emphasis on problem-solving. Units are: Expressions and Equations, Two variable Algebra, Interpreting and Building Functions.

Geometry (0151) - 1 credit

9-10th grade Prerequisite: Algebra 1

This course serves as the foundational course for higher levels of math. A variety of Geometrical topics like points, lines, planes, angles, congruent triangles, quadrilaterals, circles, and polygons will be covered.

Honors Geometry (0170) - 1 credit

9-10th grade Prerequisite: Algebra 1

Honors Geometry is designed to develop spatial concepts and insight into the relationships between plane figures such as points, lines, polygons, and circles. To appreciate the power of logic as a tool for understanding the world, the concept of proof is a substantial focus of the course.

Algebra 2 (0152) - 1 credit

10-11th grade *Prerequisite: Geometry*

Students will use mathematical statements and representations to describe linear, exponential, logarithmic, rational, quadratic, and trigonometric functions. Students will investigate and generalize patterns with an emphasis on communication of mathematical ideas and reflection of process to deepen understanding.

Honors Algebra 2 (0171) - 1 credit

10-11th grade Prerequisite: A B or higher in Honors Geometry or instructor approval

Students in Honors Algebra 2 will investigate the same functions and topics as are studied in the Algebra 2 course; however, students will study topics in more depth and breadth.

Pre-Calculus (0153) - 1 credit

11-12th grade Prerequisite: Algebra II

Pre-Calculus is the preparation for Calculus. The study of the topics, concepts, and procedures of Pre-Calculus deepens students' understanding of algebra and extends their ability to apply algebra concepts and procedures at higher conceptual levels, as a tool, and in the study of other subjects.

Honors Pre-Calculus (0172) - 1 credit

11-12th grade Prerequisite: A B or higher in Honors Algebra II or instructor approval.

Honors Pre-Calculus prepares the student to take AP Calculus. This honors class continues in increased complexity of the topics, concepts, and procedures of pre-calculus, and also moves at a faster pace than Pre-Calculus.

Statistics (0155) - 1 credit

11-12th **grade** Prerequisite: Algebra 2 or Geometry with teacher recommendation.

This course is designed to study mathematics applied to Humanities and Social Sciences. Technological applications of the graphing calculator (TI), computer (Excel), and Internet (as time allows) are emphasized. Project-based assignments are used in assessment as well as tests and quizzes. Topics include data gathering, using different sampling methods, calculating measures of center, variation and spread by hand and on the TI Calculator, the basics of experiment design, and displaying data through graphs. Probability and game theory, and spreadsheets may be included.

Business Math (0414) - 1 credit

12th grade Prerequisite: Algebra 2

Many young people graduate without a basic understanding of money and money management, business, the economy, and investing. So we want to provide them with an opportunity to deal with and play with the following: Personal finance, Money Management, Business Skills, Economic fundamentals and real life skills.

Calculus (0154) - 1 credit

12th grade Prerequisite: Pre-Calculus

This course introduces the student to Calculus, stressing an intuitive approach as well as problem solving techniques. Major topics include limits, derivatives and integrals of algebraic and trigonometric functions, and applications. Emphasis is placed on being able to solve problems with and without a graphing calculator.

AP Calculus AB (0173)) - 1 credit

12th **grade** Prerequisite: Honors or Regular Pre-Calculus with teacher recommendation

Calculus AB is the equivalent of a college-level course that includes; derivatives of algebraic functions and applications of differential calculus, integration and applications of the definite integral, methods of integration, and slope fields. Graphing calculators are used throughout this course. This course culminates in students taking the AP exam.

Physical Education

A student has to have two years of Physical Education (PE) for graduation

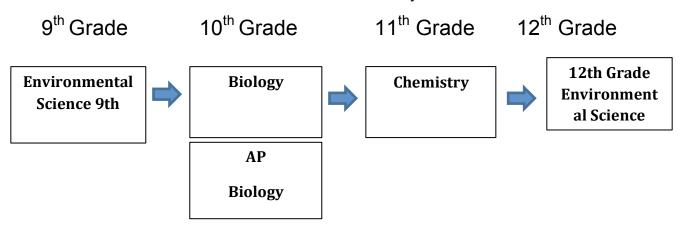
Physical Education

Physical Education (0205) - 1 credit 9-10thgrade

In PE, students will be working on various units to promote gross and fine motor skills including; flag football, basketball, soccer, track and field, volleyball, ping pong and badminton. Students will be assessed on uniform dress, active participation, and skills.

Science

A student has to have a minimum of 4 years of Science.



Environmental Science (0249) - 1 credit 9th grade *Prerequisites: none*

The aim of this course is to ensure that students develop a fundamental understanding of past and present relationships among air, water, rocks, minerals and biota. The emphasis is on the interactions between humans and the environment.

Chemistry (0251) - 1 credit

11th grade Prerequisites: Biology and Algebra I.

Chemistry is the science that systematically studies the composition, properties, and activity of organic and inorganic substances and various elementary forms of matter. Its procedures are reproducible and its hypotheses are tested using the scientific method. Students will develop knowledge and understanding of: the history of chemistry, the nature and practice of chemistry, applications and uses of chemistry, the implications of chemistry for society and the environment, current issues, research and developments in chemistry, atomic structure, the periodic table and bonding, energy, chemical reactions (including acid/base reactions and chemical equilibrium), carbon chemistry, stoichiometry, behavior of gases, concentration and solutions.

Biology (0250) - 1 credit

10th grade Prerequisites: Environmental Science

Biology is the study of living things. This year we're going to be exploring a variety of topics related to biology, including: the nature of science, relationships between living and non-living things, biodiversity, principles of cell biology, human biology, and principles of genetics and evolution. We will be taking a hands-on approach to master these topics and will incorporate lab activities, group projects, case studies, as well as viewing films, reading, writing, utilization of technology, and classroom discussion.

AP Biology (0256)

11th-12th grade *Prerequisites: Biology*

The AP Biology course is designed to enable you to develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The result will be readiness for the study of advanced topics in subsequent college courses — a goal of every AP course. AP Biology course is equivalent to a two-semester college introductory biology course and has been endorsed enthusiastically by higher education officials.

Environmental Science (0255) - 1 credit 12th grade *Prerequisites: None*

The purpose of this course is for the student to gain a global perspective for environmental issues that our world faces today. Environmental Science will be exploring these issues and the search for solutions. The class will be focusing on 8 environmental issues that is decided by each student. The teacher will take into consideration the students' preferences which issues to incorporate into the curriculum. The issues that might be explored are, but not limited to, human population, biodiversity and conservation biology, urbanization, environmental health and toxicology, freshwater resources and sustainability.

SCIENCE ELECTIVES:

Design Challenges (0421) - 0.5 Credit 11th-12th grade: *Pre-requisite Alg. II*

Students will learn to master the iterative design process used by engineers worldwide to solve real problems. Throughout this course students will encounter a combination of short-term and long-term design challenges as individuals, partners, or small groups and be assigned the task of solving the problem by designing, testing, and modifying their solution. Hands-on, inquiry based projects will be used to help students master these concepts along with videos, case studies, and class discussions.

Marine Biology (0422) - 0.5 Credit 11th-12th grade; *Pre-requisite Biology*

Students will learn about the abiotic (geological, physical, and chemical) environment that surrounds marine organisms and relates to their functions and habits, the diversity of ocean life (including: algae, plankton, invertebrates, fish, and marine mammals), marine ecology, and the scope and impact of human interactions with the oceans. Hands-on, laboratory activities and inquiry based projects will be used to help students master these concepts along with demonstrations, videos, biologist interviews, case studies, and class discussions.

Science Olympiad (0263) – 1 credit 10th, 11th, and 12th Grade

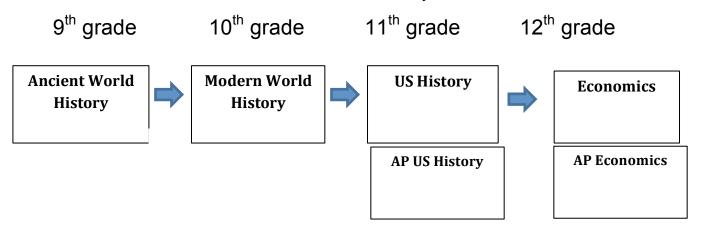
Is an academic competition founded in science, technology, engineering, and mathematics. Choose from a line-up of events in STEM disciplines and compete as scientists against local, regional, and international teams (if/when available). Events include build/hands-on, study, and interactive activities. For more info, please visit www.soinc.org.

Human Anatomy & Physiology (0462) – 1 Credit 10th, 11th, and 12th Grade

Human Anatomy and Physiology is a one-year course designed for college-bound students who desire to develop an understanding and appreciation of the human body. Students will learn about the structure and function of the body, and mechanisms for maintaining homeostasis within it from modern evidence-based anatomical and physiological perspectives through a variety of strategies. Emphasis is placed on the integration of systems as they relate to normal health. Laboratory exercises provide first-hand experience with the structures and processes.

Social Studies

A student has to have a minimum of 4 years of Social Studies.



Ancient World History (0300) - 1 credit 9th grade *Prerequisite: None*

We will study ancient times and civilizations by examining culture, innovations, politics, ethics, religion and geography. We will apply this knowledge to gain a better understanding of how humans have changed over time.

Modern World History (0301) - 1 credit 10th grade *Prerequisite: Ancient World History*

This class covers the history of the world from the European Renaissance until the present. From 1300 in Europe through China, Japan, India, Africa, the Americas and the Middle East, students cover a broad range of topics, including the age of imperialism and culminating in the World Wars and Cold War. Individual papers and group presentations along with regularly assigned reading are required.

U.S. History (0302) - 1 credit

11th grade Prerequisite: Modern World History

This course is a challenging review of the history of the United States, beginning with the Civil War. Students need to use solid reading and writing skills, along with a willingness to devote considerable time to homework and study, which are necessary to succeed. Students are responsible for keeping up with reading assignments and being aware of and ready for, quizzes and tests.

AP U.S. History (0305) - 1 credit

11-12th grade Prerequisite: B or higher in World History and English and teacher recommendation.

This college-level course is offered to all high school juniors/ seniors who meet high levels of previous class achievement. AP U.S. History is a challenging review of American History in preparation for the AP Exam.

Economics (0303) - 1 credit 12th grade Prerequisite: US History

Economics is the study of how people attempt to satisfy their unlimited wants and needs through the use of limited resources. Upon completion of the class, students will have an understanding of basic economic concepts, microeconomic concepts and theories, macroeconomic policies, and international trade. In addition, students will learn how to analyze economic data, and make economic projections. Students will also learn how to use economic reasoning when making non-economic choices. Most importantly, they will come to understand that their lives are affected by decisions made by others, and vice versa.

AP Economics (0306) - 1 credit

12th grade Prerequisite: B or higher in US (AP) US History and teacher recommendation.

AP Economics provides students with an in-depth study of fundamental economic concepts that will enable them to understand how the economy as a whole functions. This course includes a study of economic performance and growth, fiscal policy, monetary policy, and international trade.

ELECTIVES

AP Comparative Government (APCG) (0308) - 1 credit

11-12th **grade** *Prerequisite: Teacher recommendation, test scores, and a B or higher in previous history class.*

APCG is offered to all high school juniors & seniors, who have successfully completed both a standard Civics and preferably US History class. APCG is a course that covers with in-depth analysis the "AP 6" core countries UK, Russia, China, Iran, Mexico, and Nigeria. To this backdrop is added an emphasis on world societal issues, particularly the change-developments over time, as well as the "thematic focus" on Sovereignty, Authority, and Power; Political Institutions; Citizens, Society, and the State; Political and Economic

Change; Public Policy. APCG is a challenging college-level introductory course in preparation for the AP exam.

AP Human Geography (0307) - 1 credit

10-12th **grade** *Prerequisite: Teacher recommendation and B or higher in previous history class.*

In this course we will study a systematic approach of human geography to understand the use of spatial concepts and landscape analysis to examine human organization of space and the spatial relationships at different scales ranging from the local to the global. We will develop the ability to interpret maps, data sets, and geographic models using atlases, graphs, and charts.

AP Psychology (*online) – 1 Credit 10th-12th grade

This course is the equivalent of an introductory college-level course. Students receive an overview of current psychological research methods and theories. They explore the therapies used by professional counselors and clinical psychologists, and examine the reasons for normal human reactions: how people learn and think, the process of human development and human aggression, altruism, intimacy, and self-reflection. They study core psychological concepts, such as the brain and sensory functions, and learn to gauge human reactions, gather information, and form meaningful syntheses. Students prepare for the AP Exam and for further studies in psychology and life sciences.

Civics (Included in the Geography Course) - 0.5 credit 11-12th grade *Prerequisite: None (Class instruction in Spanish)*

This course covers mankind from his origins to the present day. Special emphasis is placed in change over time, periodization, and comparing and contrasting world cultures and events. Document analysis, analytical writing, and vocabulary are also emphasized.

Geography of Nicaragua (0311) - 0.5 credit 9-12th grade *Prerequisite: None (Class instruction in Spanish)*

For many, the study of geography is quite simply the description of a specific region's cities, landscapes, bodies of water, location, and thus forward. All of the previously mentioned concepts are indeed components of a field commonly referred to as physical geography. Human geography, conversely, is the study of how human beings have developed or interacted within a specific region, in terms of demographics, population, economic production and development. This class aims to introduce you to the general concepts and facts of the geography of Nicaragua—both physical and human geography.

History of Nicaragua (0312)- 0.5 credit

9-12th grade Prerequisite: None (Class instruction in Spanish)

The Nicaragua History course aims to provide students an updated summary of the different periods of development Nicaraguan society in a balanced and objective way.

Intro to Global Studies (0309) - 0.5 credit 9-12th grade *Prerequisite: None*

Required for the Global Studies Certificate, this class introduces students to globalization, the interconnections among people and places as a result of this phenomenon and various challenges within each thematic area. Topics include: processes of globalization, indicators of economic and social development, sustainable development issues, global and geo-politics, cultural integration/coherence and diversity.

Philosophy (0314) - 0.5 credit 10-12th grade *Preference given to seniority*

This class examines what has largely been considered the most fundamental questions of human existence. Relying on our rational and logical skills, we will study what many philosophers believe to be the answers to these deeply puzzling issues.

Sociology (0313) - 0.5 credit 9-12th grade *Prerequisite: None*

Sociology is the scientific study of human interaction and human group behavior in modern societies. This course covers the following concepts which are basic to sociology: (1) culture and social structure (2) the individual in society, (3)social inequality, (4)social institutions, and (5) changing social world, as related to sociology.

Global Journalism (0428) - 1 credit 9-12th grade

This elective will focus on the skills and knowledge required to produce a newspaper and press releases, and how to communicate effectively. Students will devote much of their time to the publication of their school newspaper. They will decide on the name and will write, design and format a paper that is published every 3 weeks. Students will learn how to conduct interviews, write in a variety of journalistic forms, discuss editorial positions, and help produce and edit the newspaper. They will learn how to evaluate news, advertising, and propaganda effectively. Students will also have opportunities to understand how to gain exposure and attract the press by working with our Public Relations Director on promoting events, press releases and articles.

Career Technology Education, CTE

Not a requirement for ANS Diploma graduation, but great electives

Introduction to Animation - 0.5 credit 9th-12th Grade

Students will learn traditional and digital techniques, 2-D or 3-D computer animation. In addition to basic theory and mechanics behind animation develop observational and drawing skills and study the fundamental principles of character design, layout and storyboarding.

iMovie - 0.5 credit 9th-12th Grade

Students will learn the basics of video editing on a Mac. In addition, they will learn how to import footage using hot keys to save time, how to add transitions, background music, sound effects, and more.

Career Orientation

Senior Capstone Project: - 1 credit 12th Grade

The Senior Capstone Project provides seniors the unique opportunity to pursue an area of interest, learn more about that issue/ topic, and share that information with the ANS community. This Project affords students the chance to demonstrate their abilities to, among others: plan strategically; problem solve; think critically and creatively; articulate ideas both verbally and in writing; communicate with and educate others; and manage their time effectively – all skills students have, theoretically, developed during their time at ANS. The Senior Capstone Project is, in short, the culmination of all of the skills that high school seniors have acquired during their academic careers thus far. The Capstone Project, if done well, will provide students an illustration of both their academic abilities and their academic/ professional interests in support of their applications to colleges/ universities. Most importantly, these transferable skills are also the keys to success at the college/ university level and beyond, regardless of the field of study.

College Advisory (0451) 12th Grade

This is a semester course offered 1st semester to seniors. The focus is on this college fit, college applications, essays and college admissions process. Students will also have the opportunity to meet with visiting college representatives. Those students planning to apply under the Early Decision or Early Application deadlines are strongly encouraged to enroll in this course. This course will be embedded in the Senior Thesis Course.