The Academic Department uses a Multiple Intelligences-based, holistic approach that develops in students the curiosity to seek answers; the resourcefulness, problem-solving ability and drive to find them; and the global perspective to apply that knowledge to their own lives, their communities and their world.

Course Catalog*

English

Literature and Composition 9/10/11

This course is a study of varying narrative styles and the impact of literature on society. Students will read and analyze flash fiction, creative nonfiction, plays, and traditional novels throughout a year of study. In both written analysis and group discussions, students will develop skills for expressing their ideas about texts in all of these genres. They will also practice different styles of composition, including creative writing, researched responses, literary analysis, and poetry. Through these genres, students will make thematic connections, experiencing a variety of literature through guiding questions. Each semester, students will be responsible for a culminating final portfolio of their creative writing and analysis.

Literature and Composition 12

This senior-level English course takes students through a close analytical study of literature in four different thematic contexts. Students will study the elements of travel writing and counterculture, existentialism as a literary genre, detective fiction, and a character study of the anti-hero in literature and society. Students will read a variety of novels, poems, articles, and plays through these thematic lenses. They will also develop skills in many styles of writing, consistently improving their literary analysis techniques through weekly writing assignments and in midterm and final assessments working on

other forms of writing such as fictional short stories, screenplays, and op-ed journalism.

Mastering the English Language through Teaching

This service-learning class offers students the opportunity to develop TEFL teaching techniques alongside their close grammatical study. They apply these skills weekly to designing and implementing lessons for English classes at the local elementary school. Students are assessed on their ability to practice and understand English grammar, design lessons and prepare materials, and reflect on their experience, providing feedback for themselves and their peers. The grammar studied in this course is aimed at improving writing and editing skills, while also focusing on the format and content of English sections of standardized tests. Beyond the grammar skills, students earn community service, an immersive cultural experience, and the opportunity to give back to our local community.

Integrated Reading and Writing

Integrated Reading and Writing is a year-long enrichment program in which students read texts from a wide variety of perspectives and genres. In order to maximize student engagement and interest, students are guided in selecting an essential question to explore each quarter. A combination of student input and teacher expertise determines short fiction and nonfiction texts (short stories, poetry selection, news articles, essays, etc.) to read, discuss, and write about each week.

All core-subject teachers participate in the course by reading along and facilitating formal discussions about the texts with students. The class meets once per week for 135 minutes, during which time students share their weekly reading reflections with peers and teachers, and discuss varying student perspectives on the texts. Twice per quarter, small groups of students attend writing workshops focused on progressively higher order thinking skills (comprehension, retention, analysis, synthesis, and evaluation) and work toward an individual final writing assignment.

By the end of a yearlong stay at NSA, each student learns and demonstrates critical thinking techniques that result in a writing portfolio including:

- Four quarterly reading reflections
- A creative reader response to literature
- A formal analytical essay
- A researched analysis of a text incorporating additional sources
- A formal presentation of the portfolio

Social Studies

U.S. History and Government

Fall Semester

U.S. History and Government is the general history and evolution of economic philosophy and practice and the basic principles of economics and include the philosophy of Aristotle, Thomas Aquinas, François Quesnay and the French school of Physiocrat thinkers, Adam Smith, David Ricardo, Marx, Keynes, Hayek, and many more. Throughout the quarter, we play a stock market simulation game using virtual money (one million dollars) to invest in real stocks and each student's investment portfolio is trackable and updated in real time with the real New York Stock Exchange and NASDAQ. Quarter Two focuses on the evolution of liberal political philosophy with the philosophers, economic theorists, activists, and politicians Confucius, Plato, Aristotle, Cicero, Thomas Aquinas, Giles of Rome, Francisco Suarez, Hugo Grotius, Thomas Hobbes, John Locke, Montesquieu, Benjamin Franklin, Jean-Jacques Rousseau, Immanuel Kant, Thomas Paine, Thomas Jefferson, James Madison, Mary Wollstonecraft, Simon Bolivar, Alexis de Tocqueville, John Stuart Mill, Abraham Lincoln, Henry David Thoreau, Karl Marx, Friedrich Nietzsche,, Sun Yat-Sen, Mahatma Gandhi, Vladimir Lenin, Winston Churchill, Leon Trotsky, Mao Zedong, Friedrich Hayek, Malcolm X, Noam Chomsky, Martin Luther King, Mikhail Gorbachev, Robert Nozick, and others. Throughout the quarter, we will immerse ourselves in in study of the seven Articles and 27 Amendments of *The Constitution of the United States.*

Spring Semester
The Presidents Club: (Including the U.S. Constitution, the Executive Branch, the Presidency, U.S Foreign Policy, Congress, Supreme Court, State and Local Governments and Politics, Political Parties, and the Election Process). This quarter, we use the lens of The Modern Presidents Club, using the relationships developed from 1945 to 2018 between Hoover, Truman, Eisenhower, Kennedy, Johnson, Nixon, Ford, Carter, Reagan, Bush 41, Clinton, Bush 43, Obama, and Trump to survey U.S. foreign and domestic policies from that rich history. We focus on how political power is shared and checked interdependently between national, state, and local governments, current political and social issues and controversy, as well as a look at the current election process.

A more detailed syllabus is available upon request

Prerequisite: None needed

World History

The NSA World History curriculum is designed for students to develop the skills necessary to observe, analyze, and critique information and to become analytical thinkers, effective problem solvers, and proficient communicators in real-life situations. A multiple-intelligence, project-based approach to the study of history provides the foundation for our students to be successful in these areas by allowing student-driven projects to bring our intense and comprehensive content objectives to life. The curriculum for World History is divided into two semesters covering four main topics:

- big history: the physical history of the universe, solar system, and Earth
- the biological history of the Earth and hominid evolution
- the history, development, and fates of human societies
- a 5000-year history of global conflict and political change through a focused study of guerrilla warfare, terrorism, and counterinsurgency doctrine.

A more detailed syllabus is available upon request

Prerequisite: None needed

Global Perspectives through Documentary Film

Global Perspectives through Documentary Film is a semester or year-long course fulfilling English, History, Humanities, or elective credit requirements that is built upon a foundation of award-winning social issue-based documentary films as a medium to explore history and current events, encourage social exploration and investment, spark debate, and promote civic engagement. This program is designed to facilitate these objectives through a process of exposure, engagement, and production. The course promotes deep understanding of issues, media literacy, civic education and engagement, identifying and qualifying bias, and critical viewing and evaluation of different media using both technical and non-technical criteria. The themes, one for each quarter, include Violence and Peace; Sustainability Issues and Sustainable Development; Sex and Sexuality, Gender Identity and Gender Expression, and Gender Roles and Representation in Society; and the History of The Black Power Movement, the History of Message and Protest Music, The History and Legacy of Hip-Hop, and The Civil Rights and Black Power Movements of Today.

The higher-level thinking skill projects include: preparing, presenting, and defending an argument in formal debate; using the full production process of creating documentary films on a focus area for culminating products; writing and editing questions for and conducting, recording, and presenting multiple in-depth focused interviews; writing, recording, and presenting message songs. All of the projects include a metacognitive reflection.

Prerequisite: None needed

Sociology and the Mind

Sociology is an elective course that fulfills social studies credit requirements. The course studies human society and social behavior in a scientific, systematic way. We will study how our personal worldview, values, beliefs, lifestyles, and historic events help to mold us into the unique individuals we are; we will study varied outlooks on social reality. This course deals with the social atmosphere that helps to make us who we are and influenced how we behave. Sociology will cover topics such as culture, violence, deviance, social control, socialization and personality, group behavior, social class, and social institutions. The key component of this course is to study ourselves and the society that influences our behavior.

Sciences

Chemistry

This course will serve as an introduction to chemistry principles and their application to different aspects of our daily lives. Student will learn how different substances can affect the environment and the human body. The course covers topics such as atomic structure, chemical reactions, chemical quantities, gas laws, chemical bonding, thermodynamics, acids and bases, chemical equilibrium, physical behavior of matter, kinetic energy and changes of state, organic chemistry, biochemistry and nuclear chemistry. Assessment of student learning will use Project Based Learning and/or multiple intelligence approach whenever is possible, allowing each student to use his strengths in applying learning. Students will research projects about the chemistry of pharmaceutical drugs that they currently use or have used in the past, they will debate on different topics (effects of steroids on the body for example), give a technology-based presentation (effects of different chemicals in the human body), plan and conduct several chemistry experiments, create a three dimensional model of a water reclamation system, research and process water environmental issues and propose solutions, along with more traditional assessments such as questionnaires and exams. *Prerequisite: None needed*

Biology

This course introduces students to the wonders of biology and the study of living organisms by learning its principles and relating what we learn to our everyday life. Students will learn about cell structure and function, principles of anatomy and physiology, the theory of evolution, meiosis and sexual reproduction, Mendel and heredity, DNA, gene technology, classification of organisms, ecosystems, the environment, photosynthesis and cellular respiration and other important biological processes. Assessment of student learning will use Project Based Learning and/or multiple intelligence approach whenever is possible, allowing each student to use his strengths in applying learning. Students will debate on several topics including evolutionary theories and bioethical contemporary subjects (abortion, cloning, and sex selection, among others). Students will also give a technology-based presentation on several topics, express their opinion on several topics using an artistic representation (mural, comic strip, Photoshop project, song, etc), create a model city that mimics the function of a cell, create a cell using food while following a budget, write a position paper on bioethical topics, design a new model of a human being based on their human anatomy and physiology knowledge, alongside more traditional assessments such as essay writing and exams. *Prerequisite: None needed.*

Physics

In this course, students will learn the essential concepts of Physics by means of discussions, demonstrations and labs. The class uses the world that surrounds us and its relationship to Physics as a platform for exploration through group discussions. Areas covered in the course of the year include many of the following: measurement and measurement tools, prefixes and suffixes in number systems, laws of motion, inertia, momentum, movement of falling objects, rotational motion, fluid mechanics, thermodynamics, electricity/electronics, sound and wave motion, and light/optics. Project based learning will be prioritized as the preferable way to assess student learning, but a variety of evaluation tools based on the multiple-Intelligences approach will be used regularly, these might include: oral and writing exams, questionnaires, real life problem solving using physics, laboratories and lab reports.

Prerequisite: Algebra II

Biotechnology

In this course students will explore the fundamental principles of biotechnology and its applications in the modern world. Units of study include: structure and functioning of DNA, RNA, and proteins; gene expression; plant and animal agriculture;; genetic diagnostics; healthcare and pharmaceuticals; food processing (GMO's); fermentation technology; energy and environmental management; forensic science; cloning; stem cells; CRISPR/Cas9 and bioethics. Laboratory activities reinforce concepts and principles presented. Project based learning will be prioritized as the preferable way to assess student learning, but a variety of evaluation tools based on the multiple-Intelligences approach will be used regularly, these might include: oral and writing exams, questionnaires, real life problem solving using physics, laboratories and lab reports.

Prerequisite: Biology

Mathematics

Algebra 1

This course is designed to give students a solid foundation for all future mathematics courses. The fundamentals of algebraic problem solving are explained through an exploration of abstract and real life examples of: basic order of operations on polynomials, evaluating and simplifying rational and radical expressions and functions, factoring, law of exponents, linear equations and inequalities in one and two variables, quadratic equations, and systems of equations. Probability, data analysis, and measures of central tendency are also explored. Prerequisite: Pre-Algebra.

Algebra 2

This course is designed to build upon algebraic and geometric concepts by honing the advanced algebra skills needed to solve problems involving systems of equations, advanced operations on polynomials, imaginary and complex numbers, quadratics, conics, and trigonometric functions. It also introduces arithmetic and geometric sequences as well as matrices and their properties. This is accomplished in part by connecting abstract concepts to concrete real life examples. Prerequisite: Algebra 1, Geometry

Geometry

This course is designed to study properties and applications of common geometric figures in two and three dimensions, including right triangle trigonometry and the study of transformations on the coordinate plane. Inductive and deductive reasoning skills are used to problem solve both conceptual and real life applications of a variety of concepts. Setting up and solving word problems is a major focus of this course, as is justifying geometric properties by writing proofs. Geometry incorporates many algebraic components; therefore, a solid understanding of algebra is beneficial for mastering geometric concepts. Prerequisite: Algebra 1.

Pre-Calculus

This course, designed as an in-depth extension of Geometry and Algebra 2, covers advanced topics in algebra ranging from evaluating and graphing polynomial, rational, exponential and logarithmic functions, to conic sections and systems of equations in three dimensions. Trigonometry concepts are explored in more depth, as well as analytic geometry and calculus concepts such as vectors, alternative number systems, limits, derivatives, and integrals. Prerequisites: Geometry and Algebra 2

Spanish

Beginning Spanish

The objective of this class is to enrich the process of learning through participating in homestay or cultural activities on Sundays and in all of Costa Rica's national celebrations while learning grammar and vocabulary in Spanish class. This class has a holistic and creative program that gets the student involved the student in the culture and the language.

This beginner course is designed for non-native Spanish speakers to become familiar with speaking a second language. In the first level at NSA, we focus on learning and using vocabulary and phrases that will be useful in students' interactions with Spanish-speaking staff and the communities of Atenas and Costa Rica. We then learn and practice asking and answering basic questions to reach a level of basic communication.

A major benefit of the course is our ability to immerse students in the language and culture of Spanish, as well as the ability to take advantage of having native speakers from Costa Rica teaching the language and culture. We are able to conduct classes and practice sessions in the Central Market, restaurants and parks where students practice their language skills in the real world. *Prerequisite: None Needed*

Intermediate Spanish

The objective of this class is to enrich the process of learning through participating in homestay or cultural activities on Sundays and in all of Costa Rica's national celebrations while learning grammar and vocabulary in Spanish class. This class has a holistic and creative program that gets the student involved in the culture and the language.

In this course, students are able to put into practice what they have learned in Beginner Spanish. The purpose of the course is to facilitate the students in continuing to develop their communicative competencies (listening, speaking, reading and writing). Students learn and practice conversing about specific subjects and in different tenses applied to real situations such as the market, bank, restaurants and schools.

Students also learn to communicate in writing through letters, completing documents and filling out forms, developing reports and researching various topics. Students will develop a strong level of listening comprehension which is so vital to second language learning, and will be immersed in the language and culture of Costa Rica. *Prerequisite: Beginning Spanish or Instructor Approval*

Advanced Spanish Immersion

The objective of this class is to enrich the process of learning through participating in homestay or cultural activities on Sundays and in all of Costa Rica's national celebrations while learning grammar and vocabulary in Spanish class. This class has a holistic and creative program that gets the student involved

the student in the culture and the language.

In this course, students with advanced Spanish skills have the opportunity to further hone their abilities through supported independent immersion opportunities. Students may elect to dive into Spanish Literature and develop culminating projects, work within the school community alongside Costa Rican staff to practice real-world language skills, serve as teacher's assistants developing and giving Spanish language classes to peers, or any combination of the above. Grammar and pronunciation classes support the students in their experiences. *Prerequisite: Instructor Approval*

Arts

Photography

This weekly class explores the use of photography to tell stories, express emotions, and as a form of meditation to create a heightened sense of awareness. Students learn the fundamentals of camera operation, composition, understanding natural light, street photography, photographic abstracts, flash photography and formal studio lighting, which includes portraiture, table top products and food photography. Each week students receive a one hour formal lecture and are then given assignments to be completed that week. Each week students receive a formal critique of the past week's assignment. This critique is essential for the students' understanding of the photographic processes of lighting, composition and basic camera functions. This is a unique time in the students' lives, and using photography as a way to document this experience has incredible lasting value. *Prerequisite: None needed*

Visual Arts

This student-driven course explores creative expression with two-dimensional and three-dimensional visual arts media. Students are introduced to visual art techniques in a studio setting. Elements of composition, including color theory and design principles, will be integrated into the context and the message of the work they create. We will look at periods in art history or trends in current art as visual inspiration or as stimuli for contextual development. Theory, technique and image development will be combined to create meaningful self-directed projects. Students will work on individual and group projects for self-expression and identity development in an art as therapy modality. Examples of past projects include graffiti (stencils, wheat paste, social commentary, Bansky, Os Gememos, etc.) and mask-making (plaster gauze molds, color theory, cultural examples and significance.) Assessment will be project-based on creative investment, concept integration, artist statements, and project completion. *Prerequisite: None needed*

Documentary Filmmaking

The Documentary Filmmaking Course is designed to teach students the core concepts and techniques of nonfiction filmmaking through the development, production and completion of a documentary movie 5-10 minutes in length.

The course is project-based, so students begin by learning the basics of camera, available lighting, story development, proposal writing and interviewing skills. As students develop these skills they will put them immediately into practice by creating a short documentary. Students learn specific techniques for editing non-fiction films using IMovie. *Prerequisite: Instructor Approval*

Music Studio and Performance Combo

This project-based course is built around a computer software and hardware-based music studio (Pro Tools, Reason, Ableton, Fruity Loops, and Audacity software and AVID-functioning input-output device hardware) and standard music combo instruments: guitar (acoustic and/ or electric), bass (electric), ten

piece drum kit (acoustic), electric keyboards/ synthesizers, vocal and instrument microphones, hand drums, hand percussion, and an electronic (sample-based, pad-triggered) percussion instrument. In addition to using premiere, industry-standard music studio recording software, the class utilizes integrated and complex digital music composition software, and sophisticated digital looping software. Some music students focus on traditional musical performance combos with the goal of working up an album's worth or part of an album's worth of material for an end of quarter performance and/ or for recording an album. Others concentrate on the studio aspects of the class with the goal of creating an album's worth of original digital music material per quarter and/ or engineering the recording session for the music performance combo's album project and in the development of music studio engineering skills. Others focus on lyric writing and solo or collaborative recording and performance projects. The latter group may spend time each quarter working with our English teacher work-shopping and developing their lyrical skills with the incorporation of word choice, literary elements and devices, phasing, and voice with the goal of developing more and more sophisticated and expressive lyrics. For these students, time may also be spent in the studio cutting their tracks. *Prerequisite: Instructor Approval*

Creative Writing

The creative writing art block is driven by the interests of the students. Marked by weekly writing workshops and a final project, students identify desired areas of growth in their own writing which are developed into activities, assignments, and deadlines. Students apply content from weekly workshops into their final projects each week. They also work on smaller projects to develop targeted skills. Students are encouraged to share writing with the group, developing skills in providing feedback and learning from the varied artistic strengths of their peers. Because the course is student driven, any and all styles of writing and writers coexist, allowing students to improve their craft while providing the opportunity to experiment with other genres and styles of writing.

Experiential Education

Corcovado Aventura

The Corcovado Aventura is a five-day backpacking expedition in which students explore lowland tropical rainforests. Students will explore introductory forest ecology by examining indicator species, light-gap dynamics and forest succession, symbiotic relationships, plant identification and integral factors needed for rainforest health. As well, students will focus on team building and group dynamic relationships as they delve into one of two personal growth themes: personal awareness or goal setting, dependent on the individual student's progress and his length of enrollment to date at New Summit Academy.

Students will be able to exhibit a more thorough understanding of forest ecology and its overall importance to global health. They will show increased awareness of their individual footprint on planet Earth and a desire to act as stewards in conserving natural resources. Through their experience in expeditionary behavior, students will become more effective team members in any setting, academically or professionally, as they will have become more comfortable with their own strengths and weaknesses. *Prerequisite: First or Second Quarter Student*

Kayak Aventura

The Kayak Aventura is a five day sea-kayaking expedition when students explore watershed ecology by looking at mangrove and coral reef ecosystems as indicators for the overall health of the Golfo Dulce Watershed. As well, students will focus on team building and group dynamic relationships as they delve into one of two personal growth themes: personal awareness or goal setting, dependent on the individual student's progress and his length of enrollment to date at New Summit Academy.

Students will be able to exhibit a more thorough understanding of watershed ecology and its overall importance to global health. They will show increased awareness of their individual footprint on planet Earth and a desire to act as stewards in conserving natural resources. Through their experience in expeditionary behavior, students will become more effective team members in any setting, academically or professionally, as they will have become more comfortable with their own strengths and weaknesses. *Prerequisite: First or Second Quarter Student*

Cloud Forest Aventura

The Cloud Forest Aventura is a three-day backpacking expedition through the higher- elevation cloud forests of Tapanti National Park followed by two days of whitewater rafting on the Pacuare River. Students will use the cloud forest as a classroom to examine all biotic and abiotic factors that constitute macro-ecosystems, or biomes. After studying and understanding global biomes, students will then use

their knowledge to practice stewardship as they work together to plan hypothetical communities. Students will improve their efficiency in working within a team and will be able to articulate how group dynamic relationships can help them in their individual processes as they focus on the action of accomplishing their goals.

Students will be able to exhibit a more thorough understanding of biological communities and their overall importance to biomes and global health. They will show increased awareness of their individual footprint on planet Earth and a desire to act as stewards in conserving natural resources. Through their experience in expeditionary behavior, students will become more effective team members in any setting, academically or professionally, as they will have become more comfortable with their own strengths and weaknesses. *Prerequisites: Successful Completion of Corcovado and Kayak Aventuras*

Chirripo Aventura

The Chirripo Aventura is a three-day backpacking expedition through cloud forests and paramo ecosystems of Chirripo National Park. Chirripo is the final Aventura in the integrated series of Aventuras required for graduation from the NSA Program. Students will use Chirripo's mysterious and secluded outdoor classroom to study the last of Costa Rica's ecosystems: "El Paramo" or Alpine. Students will learn the major components of alpine ecosystems, experience expedition behavior, explore their own limits of physical endurance and reflect on their personal growth process while enrolled at NSA while engaged in walking meditation (solos) to prepare for the transition to the next step.

Students will be able to exhibit a more thorough understanding of biological communities and their overall importance to biomes and global health. They will show increased awareness of their individual footprint on planet Earth and a desire to act as stewards in conserving natural resources. Through their experience in expeditionary behavior, students will become more effective team members in any setting, academically or professionally, as they will have become more comfortable with their own strengths and weaknesses. *Prerequisites: Successful Completion of Corcovado, Kayak and Cloud Forest Aventura; Approval of Transition Plan*

Global Citizenship

With a mission to "nurture and empower students toward healthier lifestyles through processing experiences and solving problems to become more relationship-based, goal-driven, resourceful global citizens," New Summit Academy Costa Rica is dedicated to developing global competencies in its students. For more than a decade, New Summit Academy has been committed to global citizenship education. The Global Citizenship Program involves a commitment to action and personal development through completion of activities in three areas over a twelve-month time period.

The New Summit Academy Global Citizenship Certificate aims to encourage students to become better global citizens by:

- Investigating global issues beyond their immediate environment
- Recognizing cultures and perspectives, others' and their own
- Communicating ideas effectively with diverse audiences
- Discovering how their own choices affect people and the planet
- Taking action to improve their local and global communities
- Reflecting on their personal development and awareness

Every four weeks, New Summit Academy academic staff focus learning objectives on one of the eight facets of Global Citizenship as it relates to other classes across the curriculum. Facets include: Interdependence, Conflict Resolution, Sustainable Development, Social Justice, Diversity, Human Rights, Ecological Stewardship, and Digital Citizenship

*Some courses may not be available during some semesters.