CRIA

COSTA RICA INTERNATIONAL ACADEMY

THINK • ASPIRE • ACHIEVE

Secondary School 2021–2022

Program of Studies

Contents

Introduction

This Secondary School Program of Studies booklet is intended to provide valuable information to allow students and parents to make selections that will best prepare for future success. It has been designed to explain the rich variety of challenging and rigorous choices available.

Mission

Costa Rica International Academy, a U.S. accredited college preparatory school serving an international community, inspires a passion for learning and provides children with the skills, values, and courage to become responsible leaders in their communities and the world.

Vision

We aspire to be a world-class international school with a culture of high expectations, high performance and accountability.

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High School Graduation Requirements

Minimum Credits Required for Graduation		
English	4	English 9, English 10, American Literature, British Literature, or AP language arts courses
Social Science	3	Early World History 9, Modern World History 10, Modern U.S. History, Economics, or AP history courses
Mathematics	3*	Algebra I, Geometry, Algebra II, Pre-Calculus, AP or Honors Calculus AB, or other AP math courses
Science	3	Biology, Chemistry, Physics are required courses, AP Biology, or other AP science courses (two courses must include laboratory experience)
Languages	3	Spanish: Spanish I – IV, AP Spanish Language & Culture, AP Spanish Literature, or other foreign language courses
Fine Arts	1	Art, Music
Physical Education	1	Physical Education 9-12
Core Electives	6	Elective credits may be chosen from previously listed courses, enrichment electives, and online providers such as K12 and Virtual High School
TOTAL	24	*Transfer credits from other institutions will be at the Director's discretion*

Service Learning Implementation

Students must serve a minimum number of hours of community service as a requirement of graduation from Costa Rica International Academy. A minimum of 10 hours is required per year. The end-of-year CRIA Report Card and Transcript will reflect the successful or unsuccessful completion of required community service hours.

Please see the Community Service Policy for more details.

High School Credit Earned in Middle School

A student is eligible to earn a high school math credit if Algebra 1 is taken in 8th grade. CRIA does not offer any other high school courses in middle school and will accept only 1 HS math credit earned in 8th grade.

Advanced Placement Courses

AP courses are demanding, and challenging courses intended for students who demonstrate potential for college level work. Prerequisites are required for all AP courses, which can be found in the course description. Many universities and colleges grant advanced standing and/or college credit on the basis of how well a student performs on the AP exam.

FARO Test

All CRIA students in 11th grade will be required to sit for the FARO exam from MEP near the end of the school year. 2021 will be the first year this test is required. More information will be forthcoming.

** Several colleges and universities require 4 years of mathematics. Please visit the university website for clarification.*

English Language Arts

English Graduation Requirements – 4 credits

- English 9
- English 10
- English 11 (or an AP English)
- English 12 (or an AP English)

Essential to any society are its language and literature. They define and connect us as people. They enable us to preserve traditions, to create and maintain community, and to envision the future. Strong literacy skills in reading, writing, listening, and speaking are critical to career and college success. The program of studies in English is designed to cultivate in each of our students proficiency in and appreciation of language and literature. Texts selected for study reflect a variety of genres, cultures, and time periods. Texts are selected based on complexity and literary merit.

Through their experiences in the English classroom, students develop voice, refine the knowledge and skills necessary for achieving high standards, participate in a community of learners, and expand the scope of their lives.

CRIA's English Course Pathway

	6th	7th	8th	9th	10th	11th	12th
Pathway	Grade 6	Grade 7	Grade 8	World Lit	World Lit	American Literature AP English Language & Comp.	British Literature AP English Language & Comp.

ENGLISH 6

Prerequisite: English 5

CONTENT

In sixth grade, students continue to build upon skills previously taught in earlier grades. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will identify elements of narrative structure including identifying theme and analyzing figurative language. In sixth grade, there is an increased emphasis on nonfiction reading by creating objective summaries and drawing inferences using textual evidence. The student will begin the study of word origins and continue vocabulary development. The student will also plan, draft, revise, and edit writing in a variety of forms with an emphasis on narrative and reflective writing. Students will continue to deliver multimodal presentations individually and in collaborative groups. Students will also interpret information presented in diverse media formats. The student will find, evaluate, and select appropriate resources for a research product and cite both primary and secondary sources. As in earlier grades, the meaning and consequences of plagiarism will be stressed.

ENGLISH 7

Prerequisite: English 6

CONTENT

In seventh grade, students continue to build upon skills previously taught in earlier grades. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will identify elements of a variety of genres while focusing on an author's style. In seventh grade, there is an increased emphasis on nonfiction reading, and students will identify the source, point-of-view, and purpose of texts. The student will continue the study of word origins and roots and begin identifying connotations. The student will also plan, draft, revise, and edit writing in a variety of forms with an emphasis on expository and persuasive writing. Students will write to develop and modify a central idea, tone, and voice to fit the audience and purpose. Students will continue to deliver multimodal presentations individually and in collaborative groups. Students will also interpret information presented in diverse media formats. Students share responsibility for collaborative work, as both a contributor and a facilitator, while working for consensus to accomplish goals. The student will apply research techniques to quote, summarize, and paraphrase research findings while properly citing sources. As in earlier grades, the meaning and consequences of plagiarism will be stressed.

ENGLISH 8

Prerequisite: English 7

CONTENT

In eighth grade, students continue to build upon skills previously learned in earlier grades. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will explain the development of theme(s), and compare/contrast authors' styles. In eighth grade, there will be an increased emphasis on nonfiction reading, and students will analyze authors' qualifications, point-of-view, and style. The student will continue the study of word origins, roots, connotations, and denotations. The student will also plan, draft, revise, and edit while writing in a variety of forms with an emphasis on expository and persuasive writing. Students will compose a thesis statement and defend a position with reasons and evidence. Students will evaluate, analyze, develop, and produce media messages. Students will create multimodal presentations that include different points-of-view, and collaborate with others to exchange ideas, make decisions, and solve problems. The student will apply research techniques to analyze information gathered from diverse sources by identifying misconceptions and possible bias. Students will also cite primary and secondary sources using either MLA or APA style sheet. As in earlier grades, the meaning and consequences of plagiarism will be stressed.

ENGLISH 9: World Literature 1.0 Credit

Prerequisite: English 8

CONTENT

In ninth grade, students continue to build upon skills previously learned in earlier grades. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will apply knowledge of literary terms and analyze a variety of genres. In ninth grade there will be an increased emphasis on nonfiction reading, and students will make inferences and draw conclusions using explicit and implied textual evidence. The student will continue to expand vocabulary using the structural analysis of roots and affixes to understand complex words. The student will also plan, draft, revise, and edit while writing in a variety of forms with an emphasis on analysis and persuasion while defending a position using counterclaims, reasons and evidence from credible sources. Students will analyze and interpret the social, commercial, and/or political motives behind media messages. Students will use multimodal tools to create presentations both independently and in small groups. The student will apply research techniques to analyze information gathered from diverse sources by identifying misconceptions, and possible bias citing both quoted and paraphrased information using either MLA or APA style. Students will continue to work in collaborative groups assisting with setting rules and working toward consensus.

ENGLISH 10: World Literature 1.0 Credit

Prerequisite: English 9

CONTENT

In tenth grade, students continue to build upon skills learned in earlier grades. There is a sustained emphasis on reading comprehension by comparing fiction and nonfiction texts. Students will analyze the cultural and social function and universal themes of fictional texts from different cultures. Tenth grade students will analyze and synthesize information from nonfiction texts to solve problems, answer questions, and generate new knowledge. The student will continue development of vocabulary, with attention to connotations, idioms, classical allusions, and figurative language. The student will continue to use the writing process to write/compose with an emphasis on persuasion and analysis while showing relationships among claims, reasons, and evidence from reliable sources. The student will create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. Students will continue to use multimodal tools to create presentations both independently and in small groups. The student will continue to build research skills presenting information gathered from diverse sources, identifying misconceptions and possible bias while crediting sources using MLA or APA style. The tenth-grade student will continue to become a skilled communicator, working both independently and in collaborative groups while presenting alternate views and working toward common goals.

ENGLISH 11: American Literature 1.0 Credit

Prerequisite: English 10

CONTENT

In eleventh grade, there is a sustained emphasis on reading comprehension of fiction and nonfiction texts. Students will conduct comparative analyses of multiple texts that address the same topic to determine how authors reach similar or different conclusions. The students will examine and analyze fiction texts by American authors describing the contributions of other cultures and identifying prevalent themes and characterizations, which are reflective of American history and culture. The student will continue development of vocabulary, with attention to connotations, idioms, classical allusions, and figurative language. The grade-eleven student will continue to use the writing process to write/compose with an emphasis on persuasion/argumentation for multiple purposes and audiences to create focused, organized, and coherent writing. The student will create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. Students will create persuasive multimodal presentations that address alternative perspectives. The student will produce a research product synthesizing information from primary and secondary sources while maintaining ethical and legal guidelines for gathering and using information. The eleventh-grade student continues to build communication skills working both independently and in collaborative groups. Students will continue to demonstrate the ability to work within collaborative groups while presenting alternate views and working toward common goals.

ENGLISH 12: British Literature — 1.0 Credit

Prerequisite: English 11

CONTENT

In twelfth grade, there is a sustained emphasis on reading comprehension of fiction and nonfiction texts. Students will review multiple texts to identify and evaluate resources to make decisions and solve problems. The students will examine and analyze fiction texts by British authors evaluating how authors use key elements to contribute to meaning and interpreting how themes are connected across texts. The student will continue development of vocabulary, with attention to connotations, idioms, classical allusions, and figurative language. The grade-twelve student will continue to use the writing process to write/compose with an emphasis on persuasion/argumentation for multiple purposes and audiences to create focused, organized, and coherent writing. Students will write to a standard acceptable to both the workplace and to postsecondary education. The student will create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. Students will create persuasive/argumentative multimodal presentations both independently and in collaborative groups. The student will produce a research product synthesizing information from primary and secondary sources while maintaining ethical and legal guidelines for gathering and using information. Students will continue to demonstrate the ability to work within diverse teams and collaborative groups working toward common goals.

The bodies of literature for grades 10, 11, and 12 are interchangeable and may be taught in any of these grades.

Adv. Placement ENGLISH LANG & COMP: — 1.0 Credit

Prerequisite: English 90% in English 10 or 11

CONTENT

AP English Language and Composition is an introductory college-level composition course. Students cultivate their understanding of writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situation, claims and evidence, reasoning and organization, and style.

This course will be very helpful in preparing students for the type of writing and reasoning required at colleges and universities.

You can read more about this course description here:
https://apcentral.collegeboard.org/courses/ap-english-language-and-composition/course?course=ap-english-language-and-composition

Social Sciences

Social Science Graduation Requirements – 3 credits

Social Science courses draw upon the wealth of information and insight to be found in anthropology, history, psychology, economics, geography, political science, and sociology. The curriculum encourages students to apply the lessons of the past to the problems of the present, and to utilize investigation and problem-solving techniques to become vital participants in shaping and directing the future of our local, national, and world communities. Because of smaller class numbers during 2020-21 (Covid-19 pandemic), both 9th and 10th graders took Modern World History. Therefore, both grades will take Early World History in 2021-22. Beginning in 2022-23, 9th graders will take Early World History and 10th graders will take Modern World History.

CRIA's Social Science Course Pathway

	6th	7th	8th	9th	10th	11th	12th
Pathway	Ancient World History	World Geography and Cultures	Early U.S. History	Early World History	Early World History	AP Macro Economics World Geography Business & Entrepreneurship	

ANCIENT CIVILIZATIONS HISTORY 6

Prerequisite: Grade 5 Humanities

CONTENT

The focus for sixth grade social studies is to expand students' understanding of history through the study of people and events in ancient times before the era of European exploration and settlement. Students will explore the ancient civilizations of Mesopotamia, Egypt, India, China, Greece, and Rome. This study focuses not only on the significance of geography in the development of the human story but also on the everyday lives, problems, and accomplishments of the people and their roles in developing social, economic, and political structures of the major civilizations.

WORLD GEOGRAPHY & CULTURES 7

Prerequisite: Grade 6 Humanities

CONTENT

The focus of this course is the study of the world's peoples, places, and environments, with an emphasis on world regions. The knowledge, skills, and perspectives of the course are centered on the world's peoples and their cultural characteristics, landforms and climates, economic development, and migration and settlement patterns. Spatial concepts of geography will be used as a framework for studying interactions between humans and their environments. Using geographic resources, students will employ inquiry, research, and technology skills to ask and answer geographic questions.

Geographic skills provide the necessary tools and technologies for thinking geographically. These skills help people make important decisions in their daily lives, such as how to get to work and where to shop, vacation, or go to school. All of these decisions involve the ability to acquire, arrange, and use geographic information. Maps, as well as graphs, sketches, diagrams, photographs, and satellite-produced images, are essential tools of geography.

EARLY U.S. HISTORY 8

Prerequisite: Grade 7 Humanities

CONTENT

Students will use skills for historical and geographical analysis to explore the early history of the United States and understand ideas and events that strengthened the union. The standards for this course relate to the history of the United States from pre-Columbian times until 1865. Students will continue to learn fundamental concepts in civics, economics, and geography as they study United States history in chronological sequence and learn about change and continuity in our history. They also will study documents and speeches that laid the foundation for American ideals and institutions and will examine the everyday life of people at different times in the country's history through the use of primary and secondary sources.

The study of history must emphasize the intellectual skills required for responsible citizenship. Students will practice these skills as they extend their understanding of the essential knowledge defined by all of the standards for history and social science.

EARLY WORLD HISTORY 1.0 Credit

Prerequisite: Grade 8 Humanities

CONTENT

These standards will enable students to explore the historical development of people, places, and patterns of life from ancient times until 1500 a.d. (c.e.) in terms of the impact on Western civilization.

The study of history rests on knowledge of dates, names, places, events, and ideas. Historical understanding, however, requires students to engage in historical thinking, raise questions, and marshal evidence in support of their answers. Students engaged in historical thinking draw upon chronological thinking, historical comprehension, historical analysis and interpretation, historical research, and decision making. These skills are developed through the study of significant historical substance from the era or society being studied.

WORLD GEOGRAPHY 1.0 Credit

Prerequisite: Grade 10 Humanities

CONTENT

The focus of this course is the study of the world's peoples, places, and environments, with an emphasis on world regions. The knowledge, skills, and perspectives of the course are centered on the world's peoples and their cultural characteristics, landforms and climates, economic development, and migration and settlement patterns. Spatial concepts of geography will be used as a framework for studying interactions between humans and their environments. Using geographic resources, students will employ inquiry, research, and technology skills to ask and answer geographic questions. Particular emphasis will be placed on students' understanding and applying geographic concepts and skills to their daily lives.

Geographic skills provide the necessary tools and technologies for thinking geographically. These skills help people make important decisions in their daily lives, such as how to get to work and where to shop, vacation, or go to school. They also help people make reasoned political decisions and aid in the development and presentation of effective, persuasive arguments for and against matters of public policy. All of these decisions involve the ability to acquire, arrange, and use geographic information. Maps, as well as graphs, sketches, diagrams, photographs, and satellite-produced images, are essential tools of geography.

AP MACROECONOMICS 1.0 Credit

Prerequisite: Grade 10 Humanities with

CONTENT

AP Macroeconomics is an introductory college-level macroeconomics course. Students cultivate their understanding of the principles that apply to an economic system as a whole by using principles and models to describe economic situations and predict and explain outcomes with graphs, charts, and data as they explore concepts like economic measurements, markets, macroeconomic models, and macroeconomic policies.

This college-level course will be very helpful for any student interested in studying business in the future.

You can learn more about the course and exam here:
https://apcentral.collegeboard.org/courses/ap-macroeconomics/course?course=ap-macroeconomics

Mathematics

Mathematics Graduation Requirements – 3 credits

After completing the required courses of Algebra I, Geometry, and Algebra II, students may choose from a set of rigorous courses such as Pre-Calculus, Advanced Placement Calculus AB (Pre-Calculus is a pre-requisite for Calculus). The advanced courses offered at CRIA vary from year to year based on student demand. You can find other math courses through an online provider such as K-12 or Virtual High School. The selection of the appropriate mathematics course for each student should be based on individual needs and educational goals.
To move from Grade 7 math to the Advanced Pathway (Algebra 1), students must have achieved an overall average of 90% in Math 7 and have the Grade 7 teacher recommendation.

CRIA's Math Course Pathways

	6th	7th	8th	9th	10th	11th	12th
Standard Pathway	Grade 6	Grade 7	Pre-Algebra	Algebra I	Geometry	Algebra II	*Pre-Calculus
Advanced Pathway	Grade 6	Pre-Algebra	Algebra I	Geometry	Algebra II	*Pre-Calculus	AP Calculus

***Required for most universities and colleges**

MATH 6

Prerequisite: Math 5

CONTENT

The sixth-grade standards provide a transition from the emphasis placed on whole number arithmetic in the elementary grades to foundations of algebra. The standards include a focus on rational numbers and operations involving rational numbers. Students will use ratios to compare data sets; recognize decimals, fractions, and percents as ratios; solve single-step and multistep problems, using positive rational numbers; and gain a foundation in the understanding of and operations with integers. Students will solve problems involving area and perimeter, and begin to graph in a coordinate plane. In addition, students will build on the concept of graphical representation of data developed in the elementary grades and develop concepts regarding measures of center. Students will solve linear equations and inequalities in one variable, and use algebraic terminology. Students will represent proportional relationships using two variables as a precursor to the development of the concept of linear functions.

The use of appropriate technology and the interpretation of the results from applying technology tools must be an integral part of teaching, learning, and assessment. While learning mathematics, students will be actively engaged, using concrete materials and appropriate technologies to facilitate problem solving. However, facility in the use of technology shall not be regarded as a substitute for a student's understanding of quantitative and algebraic concepts or for proficiency in basic computations.

The acquisition of specialized mathematical vocabulary and language is crucial to a student's understanding and appreciation of the subject and fosters confidence in mathematics communication and problem solving.
Problem solving is integrated throughout the content strands. The development of problem-solving skills is a major goal of the mathematics program at every grade level. The development of skills and problem-solving strategies must be integrated early and continuously into each student's mathematics education.

MATH 7

Prerequisite: Math 6

CONTENT

The seventh-grade standards continue to emphasize the foundations of algebra. The standards address the concept of and operations with rational numbers by continuing their study from grade six. Students will build on the concept of ratios to solve problems involving proportional reasoning. Students will solve problems involving volume and surface area and focus on the relationships among the properties of quadrilaterals. Probability is investigated through comparing experimental results to theoretical expectations. Students continue to develop their understanding of solving linear equations and inequalities in one variable by applying the properties of real numbers. Students discern between proportional and non-proportional relationships and begin to develop a concept of slope as rate of change.

The use of appropriate technology and the interpretation of the results from applying technology tools must be an integral part of teaching, learning, and assessment. While learning mathematics, students will be actively engaged, using concrete materials and appropriate technologies to facilitate problem solving. However, facility in the use of technology shall not be regarded as a substitute for a student's understanding of quantitative and algebraic concepts or for proficiency in basic computations.

The acquisition of specialized mathematical vocabulary and language is crucial to a student's understanding and appreciation of the subject and fosters confidence in mathematics communication and problem solving.
Problem solving is integrated throughout the content strands. The development of problem-solving skills is a major goal of the mathematics program at every grade level. The development of skills and problem-solving strategies must be integrated early and continuously into each student's mathematics education.

PRE-ALGEBRA 7

Prerequisite: Math 6 (grade of 90% or above); transfer students must take a placement test

CONTENT

The standards continue to build on the concepts needed for success in high school level algebra, geometry, and statistics. Students will explore real numbers and the subsets of the real number system. Proportional reasoning is expounded upon as students solve a variety of problems. Students find the volume and surface area of more complex three-dimensional figures and apply transformations to geometric shapes in the coordinate plane. Students will verify and apply the Pythagorean Theorem creating a foundation for further study of triangular relationships in geometry. Students will represent data, both univariate and bivariate data, and make predictions by observing data patterns. Students build upon the algebraic concepts developed in the standards for grades six and seven mathematics, which include simplifying algebraic expressions, solving multistep equations and inequalities, and graphing linear functions. The grade eight standards are vital to providing a solid foundation in Algebra I for students in middle school mathematics.

The use of appropriate technology and the interpretation of the results from applying technology tools must be an integral part of teaching, learning, and assessment. While learning mathematics, students will be actively engaged, using concrete materials and appropriate technologies to facilitate problem solving. However, facility in the use of technology shall not be regarded as a substitute for a student's understanding of quantitative and algebraic concepts or for proficiency in basic computations.

The acquisition of specialized mathematical vocabulary and language is crucial to a student's understanding and appreciation of the subject and fosters confidence in mathematics communication and problem solving.
Problem solving is integrated throughout the content strands. The development of problem-solving skills is a major goal of the mathematics program at every grade level. The development of skills and problem-solving strategies must be integrated early and continuously into each student's mathematics education.

Pre-Algebra 8

Prerequisite: Math 7

CONTENT

The standards continue to build on the concepts needed for success in high school level algebra, geometry, and statistics. Students will explore real numbers and the subsets of the real number system. Proportional reasoning is expounded upon as students solve a variety of problems. Students find the volume and surface area of more complex three-dimensional figures and apply transformations to geometric shapes in the coordinate plane. Students will verify and apply the Pythagorean Theorem creating a foundation for further study of triangular relationships in geometry. Students will represent data, both univariate and bivariate data, and make predictions by observing data patterns. Students build upon the algebraic concepts developed in the standards for grades six and seven mathematics, which include simplifying algebraic expressions, solving multistep equations and inequalities, and graphing linear functions. The grade eight standards are vital to providing a solid foundation in Algebra I for students in middle school mathematics.

The use of appropriate technology and the interpretation of the results from applying technology tools must be an integral part of teaching, learning, and assessment. While learning mathematics, students will be actively engaged, using concrete materials and appropriate technologies to facilitate problem solving. However, facility in the use of technology shall not be regarded as a substitute for a student's understanding of quantitative and algebraic concepts or for proficiency in basic computations.

The acquisition of specialized mathematical vocabulary and language is crucial to a student's understanding and appreciation of the subject and fosters confidence in mathematics communication and problem solving.
Problem solving is integrated throughout the content strands. The development of problem-solving skills is a major goal of the mathematics program at every grade level. The development of skills and problem-solving strategies must be integrated early and continuously into each student's mathematics education.

ALGEBRA I — 1.0 Credit

Prerequisite: Math 7 (grade of 90% or above) or Math 8; transfer students must take a placement test

CONTENT

The successful mastery of Algebra I is widely considered to be the gatekeeper to success in the study of upper-level mathematics. The study of algebraic thinking begins in kindergarten and is progressively formalized prior to the study of the algebraic content found in the Algebra I Standards of Learning. Included in the progression of algebraic content is patterning, generalization of arithmetic concepts, proportional reasoning, and representing mathematical relationships using tables, symbols, and graphs. All students are expected to achieve the Algebra I standards. The study of Algebra I assists students in generalizing patterns or modeling relevant, practical situations with algebraic models. In order to assist students in developing meaning and connecting algebraic concepts to geometry and statistics, consideration should be given to the sequential development of concepts and skills by using concrete materials to assist students in making the transition from the numeric to the symbolic. Connections between Algebra I and other subject areas through practical applications may assist in helping students attach meaning to the abstract concepts of algebra.

These standards require students to use algebra as a tool for representing and solving a variety of practical problems. Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities and to analyze behaviors of functions. These standards include a transformational approach to graphing functions and writing equations when given the graph of the equation. Transformational graphing builds a strong connection between algebraic and graphic representations of functions. Graphing utilities (calculators, computers, and other technology tools) will be used to assist in teaching and learning. Graphing utilities facilitate visualizing, analyzing, and understanding algebraic and statistical behaviors and provide a powerful tool for solving and verifying solutions.

GEOMETRY 1.0 Credit

Prerequisite: Algebra I

CONTENT

This course is designed for students who have successfully completed the standards for Algebra I. All students are expected to achieve the Geometry standards. The course includes an emphasis on developing reasoning skills through the exploration of geometric relationships including properties of geometric figures, trigonometric relationships, and mathematical proofs. In this course, deductive reasoning and logic are used in direct proofs. Direct proofs are presented in different formats (typically two-column or paragraph) and employ definitions, postulates, theorems, and algebraic justifications including coordinate methods.

This set of standards includes emphasis on two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. A variety of applications and some general problem-solving techniques, including algebraic skills, should be used to implement these standards. Graphing utilities (calculators, computers, and other technology tools) and dynamic geometry applications will be used to assist in teaching and learning.

ALGEBRA II 1.0 Credit

Prerequisite: Algebra I

CONTENT

Students enrolled in Algebra II are assumed to have mastered those concepts outlined in the Algebra I standards. A thorough treatment of advanced algebraic concepts will be provided through the study of functions, equations, inequalities, systems of equations, polynomials, rational and radical equations, complex numbers, and sequences and series. Emphasis will be placed on practical applications and modeling throughout the course of study. Oral and written communication concerning the language of algebra, logic of procedures, and interpretation of results should also permeate the course.

These standards include a transformational approach to graphing functions. Transformational graphing uses translation, reflection, dilation, and rotation to generate a “family of functions” from a given “parent” function and builds a strong connection between algebraic and graphic representations of functions. Students will vary the coefficients and constants of an equation, observe the changes in the graph of the equation, and make generalizations that can be applied to many graphs.

Graphing utilities (calculators, computers, and other technology tools) will be used to assist in teaching and learning. Graphing utilities facilitate visualizing, analyzing, and understanding algebraic and statistical behaviors and provide a powerful tool for solving and verifying solutions.

PRE-CALCULUS 1.0 Credit

Prerequisite: Algebra II

CONTENT

The Pre-Calculus course is an upper level math elective designed for students who want to be better prepared to take Advanced Placement (AP) math courses and/or college Calculus. Students should be able to work with functions numerically, graphically, analytically, and verbally.

This course includes the study of trigonometric definitions, applications, graphing, and solving trigonometric equations and inequalities. Emphasis will also be placed on using connections between right triangle ratios, trigonometric functions, and circular functions. In addition, applications and modeling will be included throughout the course of study. Oral and written communication concerning the language of mathematics, logic of procedure, and interpretation of results should also permeate the course.

Graphing utilities (calculators, computers, and other technology tools) will be used to assist in teaching and learning. Graphing utilities facilitate visualizing, analyzing, and understanding algebraic and statistical behaviors and provide a powerful tool for solving and verifying solutions.

AP CALCULUS AB 1.0 Credit

Prerequisite: Pre-Calculus (grade of 85% or above)

CONTENT

The AP Calculus AB course focuses on students' understanding of calculus concepts and provide experience with methods and applications. Although computational competence is an important outcome, the main emphasis is on a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations are important. Students will regularly use technology to reinforce relationships among functions, to confirm written work, to implement experimentation, and to assist in interpreting results. Through the use of the unifying themes of calculus (e.g., derivatives, integrals, limits, approximation, and applications and modeling) the courses become cohesive rather than a collection of unrelated topics.

It is equivalent to first-year calculus courses offered by many colleges, therefore this course will be rigorous and collegiate in its presentation. Topics meet requirements set by the College Board.
You can learn more about the course here:
https://apcentral.collegeboard.org/courses/ap-calculus-ab/course?course=ap-calculus-ab

Science

Science Graduation Requirements – 3 credits

Scientific literacy has become a necessity. Everyone needs to use scientific information to make choices that arise in everyday life. In the workplace, jobs demand advanced skills, requiring people to learn, reason, think critically, make decisions, and solve problems. Understanding science and the processes of science contributes to students learning these skills in an essential way (National Research Council, 1996).

The sciences focus on student growth in understanding the nature of science. This scientific view defines the idea that explanations of nature are developed and tested using observation, experimentation, models, evidence, and systematic processes. The nature of science includes the concepts that scientific explanations are based on logical thinking; are subject to rules of evidence; are consistent with observational, inferential, and experimental evidence; are open to rational critique; and are subject to refinement and change with the addition of new scientific evidence. The nature of science includes the concept that science can provide explanations about nature and can predict potential consequences of actions but cannot be used to answer all questions.

Due to the introduction of the new FARO test at the end of Grade 11 which includes sections for biology, chemistry and physics, all three of these science courses are now required for graduation at CRIA. Due to the low number of students during the pandemic year, both 10th and 11th graders will take Chemistry in the 2021-22 year and Physics will be on offer for 11th and 12th graders during the 2022-23 academic year.

CRIA's Science Course Pathways

	6th	7th	8th	9th	10th	11th	12th
Pathway	Science 6	Science 7	Science 8	Biology	Chemistry	Chemistry	AP Env. Sci.

SCIENCE 6

Prerequisite: Science 5

CONTENT

6th Grade Science is a year-long, inquiry-oriented, integrated science course. This course explores the relationship between the earth's natural processes of thermal energy, weather and geological process through to the behavior of light waves and cells. Students will develop conceptual understanding and skills related to biological, physical, chemical and earth science topics as outlined by the NGSS standards. The course will cover specific topics including: weather, climate, natural weather hazards, thermal energy, water cycling, geology, tectonic plates, light and waves. The course includes laboratory experiments and individual / group projects designed to reinforce course content.

SCIENCE 7

Prerequisite: Science 6

CONTENT

7th Grade Science is a year-long, inquiry-oriented, integrated science course. This course explores the relationships between natural processes and human activities that cause energy to flow and matter to cycle through Earth's systems. Students will develop conceptual understanding and skills related to life, physical, chemical and earth science topics as well as engineering outlined by the NGSS standards.
The course will cover specific topics including: Matter, Chemical Reactions, Metabolic Reactions, Ecosystems, and Biodiversity as well as human impacts upon the earth's environment. The course includes laboratory experiments and individual / group projects designed to reinforce course content.

SCIENCE 8

Prerequisite: Science 7

CONTENT

8th Grade Science is a year-long inquiry-oriented, integrated science course. This course explores the relationships between three major science components including Astronomy, Physics, and Biology. Students will develop conceptual understanding and skills related to life, physical, and earth-space science topics as well as engineering outlined by the NGSS standards. The specifics topics covered this year will include: space, solar system, forces, motion, light / sound waves, and the electromagnetic spectrum. The course includes laboratory experiments and individual / group projects designed to reinforce course content.

Middle School Science Fair

A science fair will be sponsored by the middle school science department this year. This will be an exciting event for all middle school students and parents culminating in a night of activities and project presentations. Students will be able to investigate the topic of their choice. This is an opportunity for students to apply the scientific method to conduct independent research. The results of each student's research are presented in a school wide science fair where the student's efforts are displayed and where students are interviewed to determine scientific merit.

BIOLOGY 1.0 Credit

Prerequisite: Science 8

CONTENT

This course includes a study of living organisms and vital processes. Topics that will be covered in this course include scientific skills, cellular structure, cellular processes, the microscope, biochemistry, photosynthesis, protein synthesis, cell respiration, nutrition, genetics, and biological evolution. The course includes laboratory experiments and individual / group projects designed to reinforce course content.

CHEMISTY 1.0 Credit

Prerequisite: Biology

CONTENT

Grade 10 Chemistry is an introductory course which covers a variety of themes including: atomic theory and organic chemistry. Concepts of energy relationships, molarity, chemical bonding, acids / bases, formula writing, states of matter, physical / chemical equilibrium, and the periodic table are also covered. This course aims to promote the understanding of chemistry within the world that we inhabit; assist in the development of the student's ability to deduce, observe and interpret chemical reactions in the laboratory; and encourage a wider interest in chemistry as a science and appreciate the chemical nature of everyday objects and processes. Course assessments include topic exams, quizzes, laboratory reports and individual / group projects designed to reinforce learning.

AP ENVIRONMENTAL SCIENCE 1.0 Credit

Prerequisite: Biology & Chemistry (85% in both)

CONTENT

Students cultivate their understanding of the interrelationships of the natural world through inquiry-based lab investigations and field work as they explore concepts like the four Big Ideas; energy transfer, interactions between earth systems, interactions between different species and the environment, and sustainability.

You can learn more about this course here:
https://apcentral.collegeboard.org/courses/ap-environmental-science/course?course=ap-environmental-science

Spanish Language

Spanish Language Graduation Requirements – 3 credits*

The changing nature of society has placed greater demands on students. In order to succeed in the twenty-first century, they will be required to acquire new communication skills. The acquisition of other languages will enable students to communicate across cultures and gain knowledge of other cultures in order to interact effectively within the community and global marketplace. Spanish placement is determined by the Spanish Department.

CRIA's Spanish Course Pathway

	Grades 6-8			
Pathway	Spanish 1	Spanish 2	Spanish 3	Spanish 4

	Grades 9-12			
Pathway	Spanish 1	Spanish 2	Spanish 3	Spanish 4 **or** AP Spanish Language and Culture

***Spanish must be taken in Grades 9-11 and is optional in Grade 12.**

SPANISH 1 — 1.0 Credit

Prerequisite: None

CONTENT

In Spanish 1, students begin to develop communicative competence in Spanish and expand their understanding of the culture(s) of Spanish-speaking countries. Communicative competence is divided into three strands:

- Interpersonal speaking and writing as interactive processes in which students learn to communicate with another Spanish speaker
- Interpretive listening and reading as receptive processes in which students develop comprehension of Spanish
- Presentational speaking and writing in which students focus on organization of thoughts and awareness of their audience in delivering information.

In Spanish 1 classes, students learn to communicate in real-life contexts about topics that are meaningful to them. To develop students' communicative competence, emphasis is placed on use of Spanish in the classroom as exclusively as possible and on use of authentic materials to learn about the language and culture. Grammar is integrated into instruction according to the vocabulary and structures needed in the various situations in which students are required to communicate. Through the language learning process, students develop a greater understanding of the structure of their own language and the unique aspects of their own culture. An important component of learning Spanish is using the language in the real world beyond the classroom setting.

SPANISH 2 — 1.0 Credit

Prerequisite: Spanish 1

CONTENT

In Spanish 2, students continue to develop their communicative and cultural competence by interacting orally and in writing with other Spanish speakers, understanding oral and written messages in the language, and making oral and written presentations in the language. They begin to show a greater level of accuracy when using basic language structures, and they are exposed to more complex features of Spanish. They continue to focus on communicating about their immediate world and daily activities. They read material on familiar topics and write short, directed compositions. Emphasis continues to be placed on use of Spanish in the classroom as well as on use of authentic materials to learn about Spanish language and cultures. Emphasis continues to be placed on use of Spanish in the classroom as exclusively as possible, as well as on use of authentic materials to learn about the Spanish language and culture(s).

SPANISH 3 — 1.0 Credit

Prerequisite: Spanish 2

CONTENT

In Spanish 3, students continue to develop their communicative and cultural competence by interacting orally and in writing with other Spanish speakers, understanding oral and written messages in the language, and making oral and written presentations in Spanish. They communicate on a variety of topics at a level commensurate with their study, using more complex structures in the language and moving from concrete to more abstract concepts in a variety of time frames. They comprehend the main ideas of authentic materials that they listen to and read and are able to identify significant details when the topics are familiar. Students develop the ability to sustain a conversation in Spanish about topics that include historical and contemporary events and issues. Emphasis continues to be placed on use of Spanish in the classroom as exclusively as possible, as well as on use of authentic materials to learn about the Spanish language and culture(s).

SPANISH 4 — 1.0 Credit

Prerequisite: Spanish 3

CONTENT

Programa de espanol MEP. Explicacion del contenido.
El programa de estudio de español en sus contenidos toma como fundamento la lectura, comunicación oral y escritura para crear nuevas formas de expresión. Como parte del contenido en la clase de español se debe ensenar y desarrollar el uso correcto de la lengua en lo referente a su morfología, sintaxis y fonética. En el desarrollo de competencias específicas, lingüísticas sociolingüísticas, discursivas o textuales el estudiante debe dominar las habilidades, destrezas, actitudes y valores requeridos para su interacción, tanto de forma oral como escrita.
Contenido que el estudiante debe mostrar no solo comprensión sino el correcto uso:

- Dominio en el código lingüístico.
- Adecuación de la forma del mensaje.
- Cohesión textual.
- Unión y estructuración de frases.
- Coherencia y relación entre los diferentes significados de un texto.
- Dominios de estrategias para solucionar los problemas comunicativos que se presenten.

AP SPANISH LANGUAGE & CULTURE — 1.0 Credit

Prerequisite: Spanish 3 or 4 (grade of 85% or above)

CONTENT

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish.

The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music , laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

It is equivalent to first-year Spanish courses offered by many colleges, therefore this course will be rigorous and collegiate in its presentation. Topics meet requirements set by the College Board.

You can learn more about the course here:
https://apcentral.collegeboard.org/courses/ap-spanish-language-and-culture/course?course=ap-spanish-language-and-culture

Fine Arts

Fine Arts Graduation Requirements – 1 credit

Art: These courses offer opportunities to learn, explore, and concentrate on the visual art concepts while including activities in all major areas of art. Critical thinking and expression of ideas in art forms will help students to appreciate the value of art in meeting 21st century challenges, relate art to life, social and community issues.

ART 6-8

Prerequisite: None

CONTENT

An intermediate course in which students focus on the application and synthesis of previously learned concepts and more complex technical skills as students manipulate the elements of art (color, form, line, shape, space, texture, value) and the principles of design (balance, contrast, emphasis, movement, pattern, proportion, rhythm, unity, variety) in the art-making process. Observational and value drawing exercises are expanded. Color studies are reinforced using wet & dry media. Emphasis is on the development of visual language and artistic skills in various media. Creative problem solving and experimentation continue, maintaining a highly individualized response and expression.

ART 9-12 0.5 Credit

Prerequisite: None

CONTENT

A wide variety of media are presented in this course and may include drawing, printmaking, and painting materials as well as ceramics, textiles and sculpture while exploring both traditional and modern techniques. Students are encouraged to develop individual responses and solutions to the concepts presented in class. Students develop skills in the basics of line, shape, shade and texture in both two dimensional and three- dimensional forms. Art 9-12 is both an academic and practical program. Research involving art movements and artists is integrated with art production.

Physical Education

Physical Education Graduation Requirements – 1 credit

Physical education classes provide opportunities for students to improve lifelong health, fitness, and activity related skills. Physical education presents information that challenges students to improve personal fitness levels and participate in individual and team activities. Physical education is an essential component in the education of the whole child by linking cognitive knowledge to physical activity and social interaction.

PHYSICAL EDUCATION 6-8

Prerequisite: None

CONTENT

Students develop competence in modified versions of various game/sport, rhythmic, and recreational activities. They vary movement during dynamic and changing game situations. Recreational pursuits become an additional curriculum option, broadening lifelong physical activity options. The ability to analyze skill performance through observing and understanding critical elements (small, isolated parts of the whole skill or movement) is increasingly apparent, as is the application of basic scientific principles of movement and personal fitness. Students relate the importance of physical activity to health, focusing particularly on obesity and stress. They create plans for improving personal fitness. Students continue to develop responsible personal and social behaviors by demonstrating decision-making skills, conflict-resolution skills, appropriate etiquette, and respect for others. Students achieve and maintain personal fitness standards and set reasonable and appropriate goals for improvement or maintenance of health-related fitness.

PHYSICAL EDUCATION 9-12 0.5 Credit

Prerequisite: None

CONTENT

The student will demonstrate the domain of the movement skills and the patterns that will be apply to the physical activity in selected movements. Documental test in a competence level in all the basic knowledge necessary for a selected activity and the capacity to use the skill with consistency on the right configuration. The student should demonstrate a comprehension of the rules an strategies of the selected activity, and apply them suitable PE elective offers to the students the opportunity to participate in activities with fitness.

The students will select the zones where they want to concentrate to study, some options can be:

- Aerobic
- Water sports
- Individual sports
- All life activity
- Fresh air activity
- Team sports

Enrichment Electives

Enrichment courses are designed to provide challenging opportunities for students to develop knowledge and skills in fields of interest. These courses are designed to complement, enhance, and integrate learning opportunities with the required curricula. With enrichment classes targeted toward building skill sets for life, students are able to exercise a wide variety of thinking modes, such as inductive, deductive, metacognition, empathy, compassion, and visual thinking.

These courses cover a wide array of topics. Classes in any given year reflect current interests and help to maintain relevance in a rapidly changing world.

HEALTH 6-8

Prerequisite: None

CONTENT

Students will learn about healthy eating practices by acquiring a deeper understanding of nutritional concepts and the relationship between nutrition and disease. They will learn approaches to managing their own food in-take, making healthy food choices, and promoting healthy eating to others. They will also study personal safety including situations that students in these grades may encounter as they become more independent and active in a wider variety of situations and environments, including online and virtual environments. Students also consider the consequences of bullying, harassment, as well as violent behavior and examine ways of preventing or responding to it. The course will look at substance use, addictions, mental health and stress, as well as develop their understanding of the consequences of addictions and examine how concerns with body image, which are very prevalent at this age, can lead to problematic substance use. Finally, students will study human development and sexual health. There is an emphasis on developing the skills needed for maintaining healthy relationships and acquiring the knowledge and skills needed to make informed decisions about their sexual health.

Enrichment Electives

BUSINESS & ENTRPRENEURSHIP 1.0 Credits

Prerequisite: None

CONTENT

Semester 1: Intro to Business
This semester will focus on various aspects of business and will enable you to gain a better understanding of what the business arena is all about, how a business operates, and which business functions are needed in any business enterprise. Students will examine and explore different business organizations, workforce demographics, social responsibility, business ethics, entrepreneurship, small business and franchise systems, management processes, human resource management, marketing management, business decision-making, international business and the future dimensions of business opportunities in a global economy. The dynamic role of business in everyday life will be emphasized throughout the course.

Semester 2: Entrepreneurship
This semester focuses on recognizing a business opportunity, starting a business based on the recognized opportunity, and operating and maintaining that business. All students benefit from developing an appreciation for and understanding of entrepreneurship in our economy. Entrepreneurial skills are necessary not only for students who will become entrepreneurs, but also for individuals working in the increasingly competitive corporate world. Entrepreneurship is a natural fit for business education because entrepreneurship integrates the functional areas of business—accounting, finance, marketing, and management—and the legal and economic environments in which any new venture operates.

CURRENT WORLD ISSUES 1.0 Credits

Prerequisite: None

CONTENT

In the **Contemporary World Issues** course, students focus on global issues in the twenty-first century. It engages and prepares students to analyze governments, people, and cultures around the world. As we examine topics ranging from war to pandemics to national security, students wrestle with many significant challenges of our time. Students in this course engage in frank discussions of contemporary issues and use materials typical of college courses. Students apply critical thinking and research skills to examine current events and issues, including human rights, globalization, international economic activity, and environmental issues in different regions. The course content, chosen for its educational value, approaches subjects from an academic perspective. The course will cover but not be limited to Terrorism, War, Global Economics, World Religions, Media Literacy, Global Politics, Science and Technology, the Environment, Health, Natural Disasters, and U.N. Activity.

INDEPENDENT STUDY

0.5-1.0 Credits

Prerequisite: Dependent on elective choice

The independent study courses are designed for Juniors and Seniors to further challenge themselves, meet high school elective requirements, to gain college/university credit, or simply enrich their education with of-interest topics. Engaging, rigorous, interactive courses keep students focused on the content which is designed to foster the advanced critical thinking and analytical skills they will need in post-secondary education and the world beyond. Such courses as Art History, Sociology, Contemporary Health, Introduction to Computer Science, and many more are available.

These courses are self-paced and available wherever internet is available.

Course selections will be discussed with the College Counselor.
Advertising and Sales Promotion
Agriscience I: Introduction to Agriscience
Agriscience II: Sustaining Human Life
Anthropology I: Uncovering Human Mysteries
Anthropology II: More Human Mysteries Uncovered
Archaeology: Detectives of the Past
Astronomy: Exploring the Universe
Biotechnology: Unlocking Nature's Secrets
Concepts of Engineering and Technology
Criminology: Inside the Criminal Mind
Cybersecurity I
Digital Photography I: Creating Images with Impact!
Digital Photography II: Discovering Your Creative Potential
Fashion and Interior Design
Forensic Science I: Secrets of the Dead
Game Design I
Game Design II
Hospitality & Tourism: Traveling the Globe
International Business: Global Commerce in the 21st Century
Introduction to Forestry & Natural Resources
Introduction to Manufacturing: Product Design and Innovation
Introduction to Renewable Technologies
Journalism: Investigating the Truth
Law & Order: Introduction to Legal Studies
Marine Science: Secrets of the Deep Blue
Sports and Entertainment Marketing
Veterinary Science: The Care of Animals