

CAISL HIGH SCHOOL

Program Overview

PRINCIPAL'S MESSAGE

The High School program allows students to expand upon the skills and knowledge they have acquired through Elementary and Middle School. High School students are given opportunities to refine their interests while discovering new areas for academic growth. As students progress through High School, they develop the work habits and critical thinking skills required to prepare for the “diverse and ever-changing world”. Students who fulfill all of the requirements of the High School program are awarded a High School Diploma which allows them to access college and university systems around the globe.

PROGRAM OPTIONS

All CAISL students will study for the High School Diploma according to the requirements established by the Board of Trustees.

Students may, if they choose, elect to pursue additionally an International Baccalaureate Diploma in the last two years of High School. The decision as to whether or not to pursue the IB Diploma is made at the end of Grade 10. Students who wish to pursue the IB Diploma must continue to pursue the High School Diploma and to meet all requirements for a High School Diploma but will have additional requirements to fulfill the IB Diploma including the external exams in May of the last year of High School. This Program Overview is focused on the 4-year High School Diploma. The IB Diploma Program has a separate Program Guide. Below are outlined some of the essential parameters of each Diploma program:

PROGRAM OPTIONS IN 11TH AND 12TH GRADES

AMERICAN HIGH SCHOOL DIPLOMA	INTERNATIONAL BACCALAUREATE (IB) DIPLOMA
Allows for fulfillment of the High School Diploma Graduation Requirements while still allowing the student to pursue interests in the creative and performing arts and in fields related to design, information technology, and sports, both curricular and extracurricular	Prescribes 6 areas of study and deviation is not permitted.
Completion of the CAISL Graduation Project is required, effective for the Class of 2020.	Completion of the Theory of Knowledge (TOK) course, Extended Essay and CAS are required.
Courses are taken within the academic year and students may take different subjects in Grade 11 and Grade 12.	Courses are based on a two-year curriculum and changes are not permitted at the end of Grade 11.
Assessment of student work, including end-of-course (exams) is done by CAISL Teachers.	Student work submitted for the IB Diploma is “moderated” by IB Examiners (not CAISL teachers). In May of the 2nd year of the program, students take exams which are written by the IB Organization and assessed by IB Examiners.

REGARDING UNIVERSITY ADMISSION

AMERICAN HIGH SCHOOL DIPLOMA

Assessment of student work, including end-of-course (exams) is done by CAISL Teachers.

Accepted as valid Secondary qualifications for university entrance in most countries.

Accepted at all Universities in the USA; if entry into a highly competitive university is sought and the IBDP was available to the student, the student will need to explain why he/she did not pursue the additional qualification.

Accepted by UK universities but it is essential to confirm with each university how the HSD grades are assessed and SAT subject exams may be required.

Accepted by Portuguese universities (SAT Subject exams must also be taken).

INTERNATIONAL BACCALAUREATE (IB) DIPLOMA

Student work submitted for the IB Diploma is “moderated” by IB Examiners (not CAISL teachers). In May of the 2nd year of the program, students take exams which are written by the IB Organization and assessed by IB Examiners.

Accepted as valid Secondary qualifications for university entrance in most countries.

Accepted at all Universities in the USA and with high enough scores may result in ‘advanced standing’ (being exempt from some requirements or awarded college credit).

Accepted by UK universities as there is an established table for grade conversions.

Accepted by Portuguese universities.

GRADUATION REQUIREMENTS

In Grades 11 and 12, the course content in some cases is the same for both the High School Diploma and the IB Diploma.

To earn credit for the High School Diploma, the student must meet all of the requirements for successful completion as set by and assessed by the CAISL teacher and monitored by the High School Coordinator and the Secondary Principal.

Students pursuing the IB Diploma are required to meet the requirements for the High School Diploma and, in addition, submit IB-required assignments for moderation or assessment to the IB Organization which will determine the final score and whether or not the student earns the IB Diploma. (For additional information on the IB Diploma Program, see the CAISL IB Diploma Program Handbook.)

TO EARN AN **AMERICAN HIGH SCHOOL DIPLOMA** FROM CAISL, A STUDENT MUST

1. Complete eight full-time semesters in grades 9-12 at CAISL or a school deemed by CAISL to be equivalent, with a minimum of 8 courses per semester in grades 9 and 10 and 7 in grades 11 and 12.
2. Be enrolled as a full-time student at CAISL in Grade 12 with no fewer than 7 classes, one of which, with the Secondary Principal's approval, may be from an accredited online provider.
3. Earn 27 credits, distributed as follows:
 - a. 4 credits in English/Language Arts
2 years of English for Speakers of Other Languages is accepted
 - b. 3 credits in Mathematics (Algebra I or higher)
 - c. 3 credits in Science (of which at least 2 must be laboratory science)
 - d. 3 credits in Social Sciences
 - e. 2 consecutive years in a Language other than English
Portuguese as a Native/Fluent Language
World Languages—Chinese, French, Portuguese, Spanish
Chinese as a Native/Fluent Language
 - f. 3 credits in Physical Education
 - g. 1 credit in Information Technology or demonstrated proficiency
 - h. 1 credit in Fine Arts (Music, Art, Drama)
 - i. 7 credits in elective courses: An Elective Course is any course in any subject beyond that required for graduation.
 - j. Successful Completion of a Graduation Project within the last 3 semesters prior to Graduation (Effective as of Graduating Class of 2020)

Personal, Social, and Health Education (PSHE): In addition to the disciplines shown above, CAISL students take PSHE which is taught through the CAISL Personal Counseling Program in a non-graded “exploratory” concept.

		Grade 9	Grade 10	Grade 11	Grade 12
LANGUAGE ARTS		English Literature & Composition	United States Literature	English Literature (Y1)	English Literature (Y2)
		ESL	ESL	Adv. Language & Literature (Y1)	Adv. Language & Literature (Y2)
				Adv. English Language (Y1)	Adv. English Language (Y2)
MATH		Geometry	Algebra 2	Functions, Statistics, & Trig. (Y1)	Functions, Statistics, & Trig. (Y2)
		Algebra 1	Geometry	Pre-calculus & Trig. (Y1)	Pre-calculus & Trig. (Y2)
				Calculus, Trig., & Probability (Y1)	Calculus, Trig., & Probability (Y2)
SCIENCE		Physics	Chemistry	Adv. Biology (Y1)	Adv. Biology (Y2)
		Biology	Biology	Adv. Chemistry (Y1)	Adv. Chemistry (Y2)
		Physics 2 (Science Elective)		Adv. Physics (Y1)	Adv. Physics (Y2)
				Adv. Environmental Science (Y1)	Adv. Environmental Science (Y2)
SOCIAL STUDIES		Modern Civilizations	History of the USA	World History (Y1)	World History (Y2)
				Adv. Economics (Y1)	Adv. Economics (Y2)
				Adv. Psychology (Y1)	Adv. Psychology (Y2)
				Adv. Business Studies (Y1)	Adv. Business Studies (Y2)
				Philosophy (Y1)	Philosophy (Y2)
				Introduction to Economics (Social Studies Elective)	
				Introduction to Psychology (Social Studies Elective)	
PORTUGUESE NATIVE		Língua Portuguesa 9	Língua Portuguesa 10	Literatura Portuguesa (Y1)	Literatura Portuguesa (Y2)
				Lit. e Composição Portuguesa (Y1)	Lit. e Composição Portuguesa (Y2)
FOREIGN LANGUAGES		Portuguese (<i>Beginner, Intermediate or Advanced Levels</i>)		Adv. Portuguese (Y1)	Adv. Portuguese (Y2)
		French (<i>Beginner, Intermediate or Advanced Levels</i>)		Adv. French (Y1)	Adv. French (Y2)
		Spanish (<i>Beginner, Intermediate or Advanced Levels</i>)		Adv. Spanish (Y1)	Adv. Spanish (Y2)
		Chinese (<i>Beginner or Intermediate Levels</i>)			
CHINESE NATIVE				Adv. Chinese (Y1)	Adv. Chinese (Y2)
PHYSICAL EDUCATION		Grade 9 PE	Grade 10 PE	Advanced PE	
IT		Digital Media			
		Digital Literacy		Adv. Computer Science (Y1)	Adv. Computer Science (Y2)
		Introduction to Programming/3D Design			
ART DRAMA MUSIC		High School Art (Level 1 and Level 2)		Adv. Art (Y1)	Adv. Art (Y2)
		High School Drama			
		Scene Study			
		Performance Art			
				Adv. Theater Arts (Y1)	Adv. Theater Arts (Y2)
		Choir			
		String Orchestra			
		Beginning Guitar			
				Adv. Music Study (Y1)	Adv. Music Study (Y2)
PSHE		Grade 9 PSHE	Grade 10 PSHE	Grade 11 PSHE	Grade 12 PSHE

LANGUAGE ARTS

English Literature & Composition

Grade 9 English Literature and Composition students study a variety of text types, both literary and non-fiction, further honing their skills of literary analysis. Works studied come from different genres, cultures, and time periods, with an emphasis on the time periods covered in the Modern Civilization class taken concurrently. Through this, students investigate how cultural experiences impact literature. They analyze thematic development throughout the text, as well as how various texts treat the same themes differently. Ninth grade students use textual evidence, both explicit and inferred, to support summary and analysis. Students determine the impact of various authorial choices and analyze texts to determine author's purpose.

Ninth grade students write routinely over both extended and short time frames for a range of tasks, purposes, and audiences. There is a focus on writing strong thesis statements. They use the writing process to write well-organized texts, with an introduction, a clear thesis statement, relevant supporting details, precise language, formal style and an appropriate conclusion. Their writing incorporates the use of technology during development, collaboration, and production.

Students in ninth grade listen critically to various media, identify and analyze information from a variety of formats, engage in collaborative discussions, and deliver oral presentations. Students pose questions that elicit elaboration, and respond to others' questions and comments with relevant observations. In their presentations, students effectively use multimedia components and visual aids for clarification, use appropriate eye contact and volume, and apply the same conventions of standard English when speaking as in writing.

United States Literature

Grade 10 United States Literature places an emphasis on critical thinking, reading, and writing the thesis-driven essay. Students are expected to continue to improve their skills of literary analysis, building upon ninth grade, and are also exposed to a variety of text types, further honing their skills of literary analysis. During the course of the year, students will become proficient in discussing and analyzing novels, non-fiction texts, and poetry. Students are encouraged to cite strong and thorough textual evidence to support analysis of what the text says explicitly, as well as inferences drawn from the text. Moreover, students seek to determine the meaning of words and phrases as they used in the text, including figurative and connotative meanings, and also analyze the impact of specific word choices by the author and their importance in determining the meaning and tone of a text.

Grade ten also focuses on writing clearly and coherently in a persuasive context. Students are expected to support claims using valid reasoning and relevant evidence. Students write routinely over both extended and short time frames for a range of tasks, purposes, and audiences. They use the writing process to write well-organized, multi-paragraph texts, with an introduction, a clear and arguable thesis statement, relevant supporting details, precise language, formal style and appropriate conclusion. Student writing incorporates the use of technology in each stage of the writing process during development, collaboration, and production.

Tenth graders initiate and participate effectively in a range of collaborative discussions with diverse partners on topics, texts, and issues, building on the ideas of others and expressing their own clear and persuasively. They also become comfortable with presenting information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and so that style is appropriate to purpose, audience, and task.

Gr. 9 ESL

Gr.10 ESL

(ENGLISH FOR SPEAKERS OF OTHER LANGUAGES) (GRADES 9 AND 10 ONLY)

Students who still need specialized instruction in learning English, may be placed in English for Speakers of Other Languages (ESL), which is designed to teach students to become academically and socially competent in English. Students who demonstrate intermediate and advanced levels of English acquisition, but are not yet ready for English literature and composition classes with native/fluent speakers, are part of the program. These students are taught based on their individual needs and may receive support in small ESL groups or be supported in mainstream grade level classes.

ESL teachers regularly monitor student progress during the year, as students improve, to adapt the program according to student needs. This is done through work samples, observations, and official testing. Students transition from ESL when they demonstrate an advanced proficiency in the areas of listening, speaking, reading and writing.

GRADES 11 AND 12: There are three options for English at the 11th and 12th grades. Each of these is a two-year course but Year 1 may be taken without continuing to Year 2. Year 2, however, may not be taken without successful completion of Year 1.

English Literature (Y1)

English Literature (Y2)

During the first year of this 2-year program, students study and critically analyze literature from two parts of the four-part curriculum. Typically, in year 1, students complete the school choice portion and the works in translation. The school choice is when we review and further student critical analysis. The works in translation part is a critical study of works which includes consideration of the role of translation in creating meaning and how it may affect understanding of culture and nuance of a work. Students should have had

experience writing thesis-driven essays that focus on some critical analysis, as well as have had exposure to close-reading and some experience with independent critical analysis.

During the second year of this program, students continue to hone their critical analysis, by focusing on the second two parts of the course not covered in year one. This would include: the detailed study and the genre study (in our school, we study drama). Students are expected to demonstrate their comprehension and analysis of literature through further oral and written responses. They are to demonstrate an appreciation for the writer's craft in constructing meaning and representing the world around us through instances of detailed, close-reading analysis. Students in this course will have successfully completed year 1 of the course, and therefore have had instruction and practice in deeper critical analysis and will have more independence.

Adv. Language & Literature (Y1) Adv. Language & Literature (Y2)

Advanced English Language and Literature comprises four parts: two relate to the study of language and two to the study of literature. The aim is to encourage students to question the meaning generated by language as well as develop an understanding of how language, culture and context determine meaning within the texts. Through a range of both literary and non-literary texts, students will develop skills of textual analysis and critical thinking that aid in the understanding of the different interactions between text, audience and purpose. Formal and appropriate register is required in both writing as well as speaking.

In Year 1, the focus is on language in cultural context, language and mass communication, and critical study of literature

In Year 2, the focus is on texts and contexts of Literature and learning the skills of individual oral commentary.

Adv. English Language (Y1) Adv. English Language (Y2)

Open to students who are not native speakers but who have an equivalent of 4 years of experience in the English. In the first year of the program, the themes studied are Identities, Experiences, Social Organization and Sharing the Planet. Students are taught listening, speaking, reading and writing skills covering a range of texts and registers. They will develop the oral and written skills to communicate at an advanced level. Students will use a variety of strategies to maintain oral exchanges. They will also develop awareness of the importance of language in relation to other areas of knowledge and will become familiar with various cultural features of the target language countries, such as traditions, accents, and expressions.

In the 2nd Year, a new theme is added: Human Ingenuity. The main objective is for students to understand and use language to express and respond to a range of ideas with fluency and accuracy. Students will develop international mindedness through the study of the target language and its cultures.

MATH

GRADE 9: Most students study Geometry. Students may be enrolled in Algebra I if they have not taken it yet or if they need to solidify their skills.

Geometry

Geometry is designed to cultivate an in-depth understanding of mathematics. Students focus on developing their process skills through mathematical practices. They make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments, and critique the reasoning of others. Students model with mathematics and use appropriate tools strategically. They attend to precision, look for and make use of structure and look for and express regularity in repeated reasoning. Process skills are the essential elements for the mastering of math and will be developed through the content shown below.

In Geometry, students establish triangle congruence criteria, based on analysis of rigid motions and formal constructions. They use triangle congruence as a familiar foundation for the development of formal proof. Students prove theorems using a variety of formats and solve problems about triangles, quadrilaterals, circles, and other polygons. They apply reasoning to complete geometric constructions and explain why they work.

Ninth graders identify criteria for similarity of triangles, use similarity to solve problems, and apply similarity in right triangles using the Pythagorean Theorem. They use a rectangular coordinate system to verify geometric relationships, include properties of quadrilaterals and slopes of parallel and perpendicular lines.

Students' knowledge is extended to include informal explanations of circumference, area, and volume formulas. Students apply their knowledge of two-dimensional shapes to consider the shapes of cross-sections and the result of rotating a two-dimensional object about a line.

Algebra 1

In order to cultivate an in-depth understanding of mathematics, students focus on developing their process skills through mathematical practices. They make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments, and critique the reasoning of others. Students model with mathematics and use appropriate tools strategically. They attend to precision, look for and make use of structure and look for and express regularity in repeated reasoning. Process skills are the essential elements for the mastering of math and will be developed through the content shown below.

Algebra 1 students use linear equations and systems of linear equations to represent, analyze, and solve a variety of problems. Students recognize equations for proportions as special linear equations, understanding that the constant of proportionality is the slope, and the graphs are lines through the origin.

Students also use a linear equation to describe the association between two quantities in bivariate data. At this grade, fitting the model, and assessing its fit to the data are done informally. Interpreting the model in the context of the data requires students to express a relationship and to interpret the situation.

They reason on the structure of linear equations and formulas, as well as polynomials and expressions with exponents and radicals. Students strategically choose and implement procedures to solve linear equations in one variable, understanding that when they use the properties of equality and the concept of logical equivalence, they maintain the solutions of the original equation. Students solve systems of two linear equations in two variables and relate the systems to pairs of lines in the plane.

GRADE 10: Most students study Algebra 2. Students may be enrolled in Geometry if they have not taken it yet or if they need to solidify their skills.

Algebra 2

Grade 10 Algebra 2 students focus on developing their process skills through mathematical practices. They make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments, and critique the reasoning of others. Students model with mathematics and use appropriate tools strategically. They attend to precision, look for and make use of structure and look for and express regularity in repeated reasoning. Process skills are the essential elements for the mastering of math and will be developed through the content shown below. In Algebra 2, students produce graphs of functions with and without technology, while identifying important features of the function, and also solve systems of equations using substitution, elimination, and matrix methods. Students solve quadratic equations with factoring, completing the square, and with the quadratic formula, make intelligent decisions regarding which method should be used in a given circumstance, and also explore many applications of quadratic functions. Students use arithmetic and geometric sequences to solve problems, and use binomial expansion as a means of developing greater skill with exponents, and as a means of reinforcing their skill with finding patterns.

They learn the fundamental counting principle and the formulas for permutations and combinations and apply these ideas to problems involving counting. Students also examine patterns of combinations found in Pascal's triangle and apply these patterns to binomial expansions. Students will derive the equations for the conic sections – parabola, ellipse, hyperbola – from initial conditions and solve a variety of problems involving conic sections. Finally, tenth graders investigate mathematical patterns that require employing a variety of algebraic skills and knowledge and will present this investigation in a paper using correct language and notation.

GRADES 11 AND 12

There are three options for Mathematics at the 11th and 12th grades. Each of these is a two-year course but Year 1 may be taken without continuing to Year 2. Year 2, however, may not be taken without successful completion of Year 1.

Functions, Statistics, & Trig. (Y1) Functions, Statistics, & Trig. (Y2)

This course is designed for students who have successfully completed 2 years of high school Mathematics but who do not anticipate pursuing a career which requires extensive use of math.

In the first year of this two-year course, there is an emphasis on applications of mathematics and the largest section is on statistical analysis. This class prepares students to solve problems in a variety of ways, reason and extend their critical thinking skills. Greater focus is given to analysis skills and application, than performing routine operations. Student progress will be determined by: internal exams, summative projects/internal assessments, and quizzes. Graphing calculators are used as tools to assist in problem solving and are mandatory for the course.

During Y2, all parts of the curriculum are integrated which require students to solve atypical problems. An emphasis on applications of mathematics and the largest section is on statistical analysis. This class prepares students to solve problems in a variety of ways, reason and extend their critical thinking skills. Greater focus is given to analysis skills and application, than performing routine operations. Student progress will be determined by: internal exams, summative projects/internal assessments, and quizzes. Graphing calculators are used as tools to assist in problem solving and are mandatory for the course.

Pre-calculus & Trig. (Y1)

Pre-calculus & Trig. (Y2)

This course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way, rather than insisting on the mathematical rigor required for Calculus, Trigonometry, and Probability. Students, wherever possible, apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context.

Topics taught in Year 1 are Sequences and Series; Functions and Binomial Expansion; Quadratic Functions; Exponential and Logarithmic Functions; Trigonometric Functions and Differential and Integral Calculus. It is recommended that a student has at least a B in the Algebra 2 course.

Year 2 is a continuation of Year 1, but this time includes the Exploration. This internally assessed component offers students the opportunity for developing independence in their mathematical learning and encourages them to take a considered approach to various mathematical activities and to explore different mathematical ideas. It also allows to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas. Topics taught in Year 2 are Vectors and Probability and Statistics.

Calculus, Trig., & Probability (Y1) Calculus, Trig., & Probability (Y2)

This course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way, and insisting on a higher mathematical rigor and more mathematical sophistication, than one would find required for other courses. Students, wherever possible, apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context. Topics taught in Year 1 are Sequences and Series; Functions and Binomial Expansion; Polynomial Functions; Exponential and Logarithmic Functions; Trigonometric Functions; Differential and Integral Calculus; Complex Numbers and Mathematical Induction. It is recommended that a student has an A in the Algebra 2 course.

Year 2 is a continuation of Year 1, but this time includes the Exploration. This internally assessed component offers students the opportunity for developing independence in their mathematical learning and encourages them to take a considered approach to various mathematical activities and to explore different mathematical ideas. It also allows to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas. Topics taught in Year 2 are Vectors; Probability and Statistics and an option in Probability and Statistics which goes more in depth for that area.

SCIENCE

GRADES 9 AND 10

Science is taught in 4 one-semester classes in Grades 9 and 10.

The goal is to ensure that each student has sufficient familiarity with each of the science domains to enable him/her to make informed choices for further study and careers.

Should it be necessary for a potential transfer to a school in another country, it is possible to take the courses out of the normal sequence (such as both semesters of Biology in Grade 9)

Physics

Biology

Chemistry

Biology

Grades 9 and 10 Science focuses on each student developing the following science and engineering practices or skills:

- Asking questions and defining problems;
- Developing and using models;
- Planning and carrying out investigations;
- Analyzing and interpreting data;
- Constructing explanations and designing solutions;
- Engaging in argument from evidence;
- Obtaining, evaluating, and communicating information.

These skills are developed by studying the following content areas:

IN 9TH GRADE:

Physics: Motion and Stability: Forces and Interactions; Energy: Transformation and Conservation.

Biology: Ecosystems: Interactions, Energy and Dynamics; Biological Evolution: Unity and Diversity.

IN 10TH GRADE:

Chemistry: Structure, Properties, & Interactions of Matter; The Periodic Table; Chemical Reactions; Stoichiometry.

Biology: From Molecules to Organisms: Structures and Processes; Heredity: Inheritance and Variation of Traits.

Physics 2 (Science Elective)

Physics 2: Students who may wish to study for a career which requires advance study in Physics may choose to take this elective course, normally taken in 10th Grade. Called "Physics 2," this course is intended to prepare students to take the Physics SAT subject test. It covers mechanics, electricity and magnetism, waves, thermodynamics and also some modern physics. Physics 2 is also recommended for students who wish to take Advanced Physics/IB Physics in 11th or 12th grades.

GRADES 11 AND 12:

There are three options for Science at the 11th and 12th grades and one option for a Science-Social Studies Cross-Curricular Course. Advanced Computer Science (described in the Information Technology section below) may count as either a Science credit or an Information Technology credit, at the discretion of the High School Coordinator. Each of these is a two-year course but Year 1 may be taken without continuing to Year 2. Year 2, however, may not be taken without successful completion of Year 1.

Adv. Biology (Y1)

Advanced Biology (Y2)

In Advanced Biology, students research and understand the living world at all levels - from the cell to the organism, from the Nano to the Macro scale. Field work and lab techniques are essential. Students must come to the course, familiar with scientific inquiry and basic statistics, math, and chemistry skills. In Year 1, the core topics explored are Cell biology, Molecular biology, Genetics, Ecology

and Evolution and Biodiversity.

In Year 2, the core topics explored are Evolution, Biodiversity and Human physiology.

Advanced Chemistry (Y1)

Advanced Chemistry (Y2)

In Advanced Chemistry, students will study chemical concepts from a mostly qualitative perspective. While this requires math skills and proportional reasoning, a wide range of student mathematical abilities can be successful in this course.

In Year 1, students will study stoichiometry, atomic structure, periodic trends, structure and bonding, thermodynamics, kinetics and equilibrium.

In Year 2, students will design and implement an independent laboratory investigation and report their findings in an extensive laboratory report. They will study acids and bases, redox reactions, organic synthesis and the energy option.

Advanced Physics (Y1)

Advanced Physics (Y2)

Advanced Physics is an experimental science that aims at understanding and explaining the universe in which we live.

In Year 1, Core topics are studied--Measurements and Uncertainties, Mechanics, Thermodynamics, Waves, Electricity and Magnetism, Fields, Atomic, Nuclear and Particle Physics and Energy Production. They also complete several experimental investigations. Students who decide to study Physics should have a good mathematical background and should be studying mathematics at an appropriate level.

In Year 2, students study Astrophysics as well as designing and carrying out an investigation resulting in an extensive documented report.

Adv. Environmental Science (Y1) Adv. Environmental Science (Y2)

In Advanced Environmental Science students, research and understand how our choices and actions impact ecosystems, the importance of a sustainable use of resources and the dynamic nature of the relation between the natural environment and society. Field work and lab techniques will be developed. A basic knowledge of scientific inquiry and basic statistical and math skills are essential. Holistic thinking with culture, ethics, economy, society and political interactions in mind is also valuable.

In Year 1, the main topics explored are Foundations, Ecosystems and Ecology, Conservation of Biodiversity and Water, Aquatic Food Production Systems and Societies.

In Year 2, the themes explored are Soil and Terrestrial Food Production Systems and Societies, Atmospheric Systems and Societies, Climate Change and Energy Production, Human Systems and Resource Use.

SOCIAL STUDIES

GRADES 9 AND 10

Social Studies in the 9th and 10th Grades encompasses four primary areas of study:

History, Culture & Perspective

Geography, People and the Environment

Economics, Innovation & Technology

Civics, Government and Human Rights.

In 9th and 10th Grade the following courses are required:

Modern Civilizations

Grade 9 Modern Civilizations focuses on the period from the Enlightenment to Present Day. Students will analyze the impact of the Enlightenment and trace its impact over time. They will also be able to explain the significance of geopolitics in the today's world. Topics include: Revolution, Imperialism, World Wars I & II, and Modern China. Emphasis will also be placed on developing students' research skills by studying a variety of informational texts.

History of the USA

Grade 10 History of the United States covers the period from the end of the Civil War to the Present Day. Students will trace the development of the United States into a global power. They will develop their awareness of Civics, Government, and Human Rights. Topics include: US Civil War, Immigration, The Great Depression, The Cold War, Civil Rights and Foreign Policy in the Middle East. Emphasis will also be placed on developing students' research skills by studying a variety of informational texts.

High School Social Studies Electives

Introduction to Economics (Social Studies Elective)

In addition to the required 9th and 10th Grade courses, there are two other Social Studies offerings available to students in 9th and

10th Grade. Students in 11th and 12th grades may also elect to take these courses, schedules permitting.

Introduction to Economics is designed to give students a glimpse into the world of economics. The course will focus on the fundamentals of the economics and helping students see the connection between economics, mathematics, and the real world.

Introduction to Psychology (Social Studies Elective)

Introduction to Psychology focuses on providing students with a better understanding of how and why people think and act the way they do. Additionally, students learn and hopefully convey the inquisitive spirit in which psychology is studied, as it enhances our abilities to restrain intuition with critical thinking.

GRADES 11 AND 12

There are 5 options for Social Studies at the 11th and 12th grades. Environmental Systems and Society, shown in the Science section, is a cross-curricular course which can be taken for either a Science or a Social Studies credit.

Each of these is a two-year course but Year 1 may be taken without continuing to Year 2. Year 2, however, may not be taken without successful completion of Year 1.

World History (Y1)

World History (Y2)

World History is a 20th century world history course with a regional focus on Europe.

In Year 1, students develop historiographical skills, source analysis and analytical essay writing skills. These skills are honed in the context of the following historical content: the decline of Russian Tsarism, the Russian Revolutions, Stalinism, the causes, practices and effects of World War I, the rise of fascism in Italy, the German Weimar Republic and the rise of the Third Reich. There are no pre-requisites for this course.

In Year 2, the focus is on the causes, practices, and effects of World War II, the origins of the Cold War, the causes, practices and effects of the Korean War, the rise to and consolidation of power of Kim Il Sung, and the causes, practices and effects of the Spanish Civil War.

Adv. Economics (Y1)

Adv. Economics (Y2)

Advanced Economics explores microeconomics and macroeconomic ideas, theories and models. The class will focus on the basic fundamental economic problem, scarcity, and how the world decides to allocate scarce resources. Students will need to use both their social sciences and mathematic skills to solve complex world problems.

In Year 1, the class will cover microeconomics basics of supply and demand all the way to the complexities of market failures in the first semester. In the second semester, the class will focus on macroeconomic basics of Aggregate Demand/Aggregate Supply all the way to intricacies of monetary policy.

In Year 2, the topics studies will be theory of the firm and international trade and developmental economics. Both of these sections of the syllabus will focus on the world and how we can use resources efficiently and equitably. International trade section emphasizes the importance of trade and how the world market moves resources to the correct market. Developmental economics focuses on how to make sure that the whole world prospers in the growth of economies and how economics can be used to improve the lives of people in less developed countries.

Adv. Psychology (Y1)

Adv. Psychology (Y2)

The Psychology course aims to develop an awareness of how psychological knowledge is generated, developed and applied. The ethical concerns raised in psychological inquiry are also key considerations of the course. Students learn to understand the biological, cognitive and sociocultural (BCS) influences on human behavior.

In Year 1, BCS correlates of aggressive behavior are explored. Students are introduced to concepts like conformity, important theories such as Social Identity Theory, and experiments conducted by famous researchers as Asch.

In Year 2, students research, conduct and write an experimental report. Then, they develop an understanding of cognitive processes, explore biological and sociocultural origins of attraction, and the role of communication in personal relationships.

Adv. Business Studies (Y1)

Adv. Business Studies (Y2)

Business management studies business functions, management processes and decision-making in contemporary contexts of strategic uncertainty. Students examine how business decisions are influenced by factors internal and external to an organization, and how these decisions impact upon its stakeholders.

In Year 1, emphasis is placed on Introduction to Business Management, Marketing and Finance. Through the exploration of six concepts underpinning the subject (Change, Culture, Ethics, Globalization, Innovation and Strategy), students develop their understanding of the interdisciplinary concepts from a business management perspective.

In Year 2, the emphasis is on Finance, Human Resources, and Operations. Links between the topics are central to the course, as this integration promotes a holistic overview of business management.

Philosophy (Y1)

Philosophy (Y2)

This course is taught over two years, with each year of the course resulting in ½ of a credit.

The aim is to develop a critical analysis of the nature of knowledge. The course encourages students to reflect on two central questions: 1) what do we know? and 2) how do we know what we claim to know? Having these two questions in mind, several ways of knowing (reason, sense perception, language and emotion) are explored in terms of their reliability and the role they play in certain areas of knowledge (Human Sciences, Natural Sciences, Arts, Mathematics, History and Ethics).

WORLD LANGUAGE

PORTUGUESE NATIVE LANGUAGE

GRADES 9 AND 10

Língua Portuguesa 9

A disciplina de Língua Portuguesa 9 tem como objetivo centrar-se na leitura e interpretação de algumas das obras mais conceituadas da literatura lusófona: a interpretação de episódios da única epopeia portuguesa, a leitura de duas peças vicentinas, a compreensão de narrativas de autor e contacto com textos líricos. Este percurso visa desenvolver a consciência cultural e crítica do aluno. Promove-se a redação de textos argumentativos, expositivos e criativos. Na componente oral, fomenta-se a preparação e respetiva apresentação oral formal com recurso a instrumentos multimédia, ficando o/a aluno/a responsável pela análise de uma cena vicentina e de um episódio épico em trabalho colaborativo. O programa estimula, também, a aquisição e aplicação de conhecimentos linguísticos através do exercício contínuo de diversos aspetos gramaticais (como articuladores e orações) e estilísticos. Para além disso, promove-se uma reflexão sobre a evolução fonética e semântica da língua portuguesa.

Língua Portuguesa 10

A disciplina de Língua Portuguesa 10 tem como objetivo principal proporcionar a aquisição, numa perspetiva diacrónica, de uma visão panorâmica da literatura portuguesa que permita ao aluno caracterizar épocas, períodos e correntes literárias da nossa história, para nela situar os autores e as obras estudadas. Assim, do séc. XVI ao séc. XX, os alunos estudarão: uma peça de teatro vicentina; a lírica camoniana; o sermão barroco; um romance queiroziano; o texto memorialístico e o texto não-literário. Desta forma, promove-se a análise textual aliada a uma reflexão sobre o uso de diversas estratégias linguísticas para construir significados; reflete-se sobre as diferentes características de cada género de texto analisado; redigem-se diferentes tipos de texto (texto persuasivo, texto expositivo, outros textos criativos) e organizam-se apresentações orais formais com recurso a instrumentos multimédia. Serão revistos alguns aspetos da gramática portuguesa, numa perspetiva de que a língua é o suporte da literatura.

GRADES 11 AND 12

There are two options for Portuguese as a Native/Fluent Language.

Each of these is a two-year course but Year 1 may be taken without continuing to Year 2.

Year 2, however, may not be taken without successful completion of Year 1.

Literatura Portuguesa (Y1)

Literatura Portuguesa (Y2)

No 1.º ano desta disciplina, serão estudadas duas, das quatro partes que compõem o programa- Literatura Estrangeira e Escolha Livre. Os objetivos desta disciplina visam a apreensão e desenvolvimento do conhecimento da literatura portuguesa e também de alguns autores estrangeiros, quer a nível de Épocas, Géneros e Estilos literários. Pretende-se ainda, que ao longo deste estudo, haja um desenvolvimento do aluno em termos da expressão oral crítica de textos e produção escrita na sua vertente de análise literária, apreciação crítica de diversos tipos de texto, assim como o desenvolvimento da compreensão da sua e de outras culturas.

No 2.º ano desta disciplina serão estudadas as partes- Género e Estudo detalhado. Ao longo do ano pretende-se que o aluno continue a aprofundar os seus conhecimentos literários, a nível de Épocas, Géneros e Estilos Literários. Pretende-se assim que o aluno continue a sua aprendizagem ao nível do emprego de técnicas e métodos de trabalho geradores e integradores do saber nas várias vertentes da produção escrita exigida e na expressão oral. Pretende-se ainda que o aluno desenvolva as suas capacidades que lhe permitem responder, de forma autónoma, crítica e competente, às solicitações e exigências do quotidiano e simultaneamente, dimensionar a sua compreensão da cultura literária não só de autores portugueses como estrangeiros.

Lit. e Composição Portuguesa (Y1) Lit. e Composição Portuguesa (Y2)

No 1.º ano, estudar-se-á uma parte de Língua (Língua num Contexto Cultural) e uma parte de Literatura (Análise crítica). Os alunos desenvolverão as suas competências de análise de texto e redação tanto de dissertações como de textos criativos.

Os objetivos da disciplina são os seguintes: questionar e inferir os significados gerados pela língua e pelos respetivos contextos, circunstâncias de produção e receção dos textos; analisar atentamente a língua, desenvolvendo a consciência do contexto para a construção dos significados e desenvolver as competências de análise estilística e compreensão de textos, tanto literários como não literários.

No 2.º ano, estudar-se-á uma parte de Língua (Língua e Meios de Comunicação Social) e uma parte de Literatura (Textos e contextos). Os alunos continuarão a desenvolver as suas competências de análise de texto e redação, tanto de dissertações como de textos criativos.

Os objetivos da disciplina de Português A: língua e literatura são: questionar e inferir os significados gerados pela língua e pelos respetivos contextos, circunstâncias de produção e receção dos textos; analisar atentamente a língua, desenvolvendo a consciência do contexto para a construção dos significados e desenvolver as competências de análise estilística e compreensão de textos, tanto literários como não literários.

FOREIGN LANGUAGE

GRADES 9 THROUGH 12:

Portuguese (*Beginner, Intermediate or Advanced Levels*)

French (*Beginner, Intermediate or Advanced Levels*)

Spanish (*Beginner, Intermediate or Advanced Levels*)

Chinese (*Beginner or Intermediate Levels*)

CAISL offers French, Portuguese, and Spanish as Foreign Languages at the beginner, intermediate, and advanced levels and Chinese at the beginner and intermediate levels throughout High School. The goal for each of these courses is to develop knowledge of the language and increase fluency so that the student will understand the language in a wide range of situations and contexts. Different cultures related to the target language will also be explored.

It is a requirement that all students at CAISL Study Portuguese through Grade 9, either as a native or a foreign language.

GRADES 11 AND 12

French, Portuguese and Spanish are also taught at 11th and 12th Grades for students who have had 4 to 5 years of prior study of the language but who are not appropriate for a native/fluent speaker class.

This is a two-year course but Year 1 may be taken without continuing to Year 2.

Year 2, however, may not be taken without successful completion of Year 1.

Adv. Portuguese (Y1)

Adv. Portuguese (Y2)

Adv. French (Y1)

Adv. French (Y2)

Adv. Spanish (Y1)

Adv. Spanish (Y2)

In Year 1, the themes studied are Identities, Experiences, Social Organization and Sharing the Planet. Students are taught listening, speaking, reading and writing skills covering a range of texts and registers. They will develop the oral and written skills to communicate at an advanced level. Students will use a variety of strategies to maintain oral exchanges. They will also develop awareness of the importance of language in relation to other areas of knowledge and will become familiar with various cultural features of the target language countries, such as traditions, accents, and expressions.

In Year 2, the theme of Human Ingenuity is added. The main objective is for students to understand and use language to express and respond to a range of ideas with fluency and accuracy. Students will develop international mindedness through the study of the target language and its cultures.

CHINESE NATIVE LANGUAGE

GRADES 11 AND 12 ONLY:

Adv. Chinese (Y1)

Adv. Chinese (Y2)

Advanced Chinese is designed for students who are native speakers of Chinese. It comprises four parts: Language in cultural context, Language and mass communication, Literature—texts and contexts and critical study.

In Year 1, students will cover one language and one literature part. The aim is to help students develop an understanding of how

language creates meaning in different texts. Both SL and HL are offered. HL students are expected to cover more texts in more depth of knowledge and skills.

In Year 2, students will learn how to use textual analysis skills to evaluate elements of texts and how meaning is conveyed through forms, content and context.

PHYSICAL EDUCATION

Grade 9 PE

Grade 9 Physical Education focuses on teaching students about their physical selves and creating enthusiasm for physical activity while developing their physical skills and appropriate behavior involving sportsmanship and sports etiquette. We provide our students with a balanced program that builds a strong foundation in physical fitness, develops sport performance skills to an advanced level, lead-up games, and an intermediate-advanced understanding of tactics in sports.

Grade 10 PE

Grade 10 Physical Education is a continuation of skill development from Level 1. We continue to focus on individual develop and enthusiasm in physical fitness, sports performance skills, and tactics at an intermediate to advanced level.

Advanced PE

Advanced Physical Education, normally taken in Grades 11 or 12, is designed to help students develop their physical fitness and gain a greater understanding for the role that physical activity plays in a person's overall health. Students are provided with a balanced program that builds a strong foundation in physical fitness as well as in team and individual sports.

Students are given the opportunity to learn new sports and master familiar ones. This approach will serve them later on in life as they develop more independence and autonomy.

The course covers a wide range of topics including the following: fitness room (personal fitness plan), badminton, tennis, cross country, track & field, basketball, volleyball, soccer, American football, softball, orienteering, hiking and the physical fitness testing.

INFORMATION TECHNOLOGY

GRADES 9 THROUGH 12

CAISL High School students have the option throughout High School of the following courses:

Digital Media

Digital Media students are responsible for all aspects of the school's yearbook production and the skills developed are graphic design, photography, journalism, video editing, proofing, leadership and team work.

Digital Literacy

In Digital Literacy students learn how to give natural-media pizzazz to artwork, create illustrations, advertisements and image-editing compositions, do frame-by-frame animations, and video editing.

Introduction to Programming/3D Design

Introduction to Programming/3D Design is divided in two sections, Introduction to Programming and 3D Design. Students will learn to code in a programming language. Concepts like variables, values, value types, classes and methods will be addressed. The learning experience is very "hands-on" so each student can explore the language, with the given concepts, solving a particular problem of interest. Java will be used as the working programming language to create projects of different types, like desktop and mobile applications.

Students will work with Blender to apply concepts of geometry, physics and computer design. From basic shapes, like cubes, spheres, torus or cylinders, they will get more advanced shapes, combining and transforming them. Students will also animate their creations using different virtual materials, lights and camera options to achieve the best results. Mathematical functions will be applied, not as simple abstractions but as a way of achieving results. Blender will be used to create some physics simulations (e.g., fluid, rigid body, force fields). Other rendering techniques like Freestyle will also be used.

GRADES 11 AND 12

Advanced Computer Science is a two-year course but Year 1 may be taken without continuing to Year 2. Year 2, however, may not be taken without successful completion of Year 1.

At the discretion of the Secondary Principal, Advanced Computer Science may count as either a Science credit or an Information Technology credit.

Adv. Computer Science (Y1) Adv. Computer Science (Y2)

In Year 1, students will learn about theoretical concepts (e.g., binary systems, logical gates) and will also develop some practical skills (e.g., how to develop software applications). The basic content includes System fundamentals; System design basics; Computer organization; Binary representation; Logic gates; Networks; Computational thinking, problem-solving and programming; Thinking procedurally, logically, ahead, concurrently, abstractly; Connecting computational thinking and program design; Introduction to programming; Abstract data structures; Resource management; Control; Object-oriented programming.

In Year 2, students will develop a project that will be assessed internally. The project consists of an application that will solve a real-life problem. Students are encouraged to make a positive contribution to their environment, creating a useful solution and learning in that process. Also, students will be prepared to answer questions about a complex context that changes yearly (e.g., Computer Science and Health Systems, Autonomous Vehicles and Artificial Intelligence). The basic content includes Java and libraries; Object-oriented programming; The JavaFx technology; Relational Database Management Systems.

FINE ARTS

GRADES 9 THROUGH 12:

The following Fine Arts course are available to students:

ART

High School Art (Level 1 and Level 2)

High School Art has two levels, both of which focus on developing fundamental painting, drawing, and sculpting techniques in a variety of media. Students analyze artworks in relation to pivotal movements in history and various cultures.

DRAMA

Students have three Theater Arts options.

High School Drama

High School Drama focuses on performance skills and one major production during the school year.

Scene Study

Scene Study focuses on the relationship between the director and the actor.

Performance Art

Performance Art is a class in which students perform through acting, movement, music or storytelling with the objective of allowing students to express themselves through visually stimulating artwork.

MUSIC

Students have three Music options

Choir

Choir is an opportunity for students to learn and grow in the area of vocal music. Performances throughout the year are an essential part of the course.

String Orchestra

String Orchestra is available for advanced string performers with prior consent. Performances throughout the year are an essential part of the course.

Beginning Guitar

Beginning Guitar students will work on rudimentary skills both individually and as a group.

GRADES 11 AND 12

There are three additional options for Fine Arts students in 11th and 12th grades.

Each of these is a two-year course but Year 1 may be taken without continuing to Year 2.

Year 2, however, may not be taken without successful completion of Year 1.

Adv. Art (Y1)

Adv. Art (Y2)

Year 1 is devoted to the development of a foundational ability to create an independent body of work. This entails formal art historical study into medias and methods of art production, various critical methodologies for analysis, as well as a survey of major art historical traditions from around the world. Students will also be tasked to: demonstrate a sustained investigation using drawing media in their sketchbooks; initiate curatorial research into chosen thematic areas; and to produce and critique finished works. Out of class work, both in terms of at home artwork production as well as field trips and school sponsored workshops, are important components in developing student abilities. High School Art 1 and 2 are strongly recommended but students who have not passed through these earlier courses and are highly motivated may still be successful in the course.

Year 2 continues the trajectory begun in the first year with continued development and eventual fulfillment of the process portfolio, comparative study and body of work for the exhibition. Students in the second year are expected to have created a sustaining reservoir of project ideas which they wish to develop in the second year and to have an established process to create independent work without reference to instructor supplied parameters. Class exercises in the second year focus increasingly on refinement and group critique of works in process, exercises in curation designed to ensure cohesiveness of student efforts and discussion of means to effectively communicate the artist's conceptual and expressive intentions through the installation of finished artworks.

Adv. Theater Arts (Y1)

Adv. Theater Arts (Y2)

Advanced Theater Arts is designed to enable students to explore Theatre course aims to enable students to:

- Explore theatre in a variety of contexts and understand how these contexts inform practice;
- Understand and engage in the process of transforming ideas into action;
- Develop and apply theatre production, presentation and performance skills, working both independently and collaboratively.

The content is student driven and is selected within the realm of world theatre to feed the students' artistic interests and perspectives. The only requisite is that, throughout the course, students be exposed to different world theatrical traditions and practices, and approach it (as mentioned above) from different theatre making perspectives (creators, designers, directors and performers).

In Year 1, students are introduced to these goals, and start to work on their research and knowledge through a number of different artistic means. The year ends with a collaboratively created theater project.

In Year 2, theatre is a practical subject that encourages discovery through experimentation, the taking of risks and the presentation of ideas to others. It results in the development of both theatre and life skills; the building of confidence, creativity and working collaboratively.

Adv. Music Study (Y1)

Adv. Music Study (Y2)

In Year 1, the students will review and learn the rudiments of music, including scales, intervals, tonality, key signatures, meter, rhythm, chords (to the 7th). They will also learn about the evolution of Western Music from the Middle Ages to the Classical Period, while learning about the ethnic music of diverse cultures from all the continents. The three basic options for students to pursue are creating, solo performing, and group performing.

In Year 2, the students will apply their knowledge about music in analyzing scores to demonstrate understanding of the evolution of music writing and performing. They will also learn about the evolution of Western Music from the Romantic Period to the present tendencies, while continue learning about the ethnic music of diverse cultures from all the continents. They will refine, finish and submit their portfolios.

Graduation Project

The successful completion of a Graduation Project is required to receive a CAISL High School Diploma, effective beginning with the Graduation Class of 2020. Through this Project, a student will demonstrate the skills of independent pursuit of a personal interest in an academic and creative context with the guidance of a Mentor Teacher. The Project is begun mid-way through 11th Grade and must be completed by the end of 1st Semester of 12th Grade.

PERSONAL, SOCIAL & HEALTH EDUCATION

The goal of PSHE is to offer students the opportunity to learn about their personal, social and health development and to help them to find strategies to deal with the main problems that occur in this stage of development. Small group sessions, lunch time activities, guest speakers and collaborative projects, will address the following topics with the Personal, Social, and Health Education (PSHE)

The goal of PSHE is to offer students the opportunity to learn about their personal, social and health development and to help them find strategies to deal with the main problems that occur in this stage of development. PSHE is taught by the CAISL Personal and

Career/College Counsellors throughout the school year in small group sessions, lunch time activities, through guest speakers and collaborative projects. While the topics listed below for each grade are those which are anticipated to be taught annually, they may vary depending on the needs of the students.

Grade 9 PSHE

9th grade students: transition to high school (social, emotional and academic), goal setting, interests and personal skills, decision making, coping skills, responsibility, peer pressure in use of substances, personal safety, respect (prejudice/discrimination/stereotypes, empathy) and sexual health (self-esteem, setting limits, consent, healthy/unhealthy relationships, prevention). 9th grade students will have close contact with the Personal Counselor, College Counselor and High School Coordinator, so that their questions, concerns and comments can be addressed.

Grade 10 PSHE

10th grade students: self-awareness, responsibilities/expectations, integrity/ethics, motivation/goals setting, decision making, coping skills, addictions, and sexual health (consent, healthy/unhealthy relationships, prevention). 10th grade students will have close contact with the Personal Counselor, College Counselor and High School Coordinator, so that their questions, concerns and comments can be addressed.

Grade 11 PSHE

11th grade students: time management (deadlines), organizational and study skills, stress management, emotions (rejection/frustration/depression), decision making, self-reflection (past decisions/consequences, analyzing own abilities/skills, financial awareness). 11th grade students will have close contact with the Personal Counselor, College Counselor and High School Coordinator, so that their questions, concerns and comments can be addressed.

Grade 12 PSHE

12th grade students: transitions to college, life skills, stress management, emotions (rejection/frustration/depression), decision making/ consequences, time management (deadlines), organizational skills, drafting curricula vitae, college admission writing and research skills, requirements and entry admissions to different colleges/educational systems. 12th grade students will have close contact with the Personal Counselor, College Counselor and High School Coordinator, so that their questions, concerns and comments can be addressed.

