Zurich International School

Upper School Program of Studies 2021/22

Learn, Care, Challenge, Lead

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Upper School Program of Studies 2021/22

Cover photo: IB Biology students at work

ZIS Vision and Mission

Vision

Our vision is for all ZIS students to join and strengthen a global community of citizens, determined to make a difference to the organizations and communities in which they work and live. We're committed to ensuring our students develop the intellect, skills and character to become caring individuals and adaptable and independent thinkers.

Mission

We are a learning community of students, faculty, staff, and parents. At ZIS, educational excellence commits us to Learn, Care, Challenge, Lead.

Learn

— We learn by creating meaning, developing habits of mind, and acting on values.
— We teach to multiple learning styles.
— We learn to understand and to become imaginative thinkers.
— We believe that effective teaching leads to meaningful learning, and that effective teachers continue to be learners.

Care

— We provide a caring environment for the social, emotional, physical, and intellectual development of our students.
— We care for the world around us and our planet.
— We value diversity and plurality of voices.
— We are committed to the United Nations Declaration of Human Rights.

Challenge

— We challenge ourselves to be open to risk, change, and innovation.
— We challenge ourselves to ensure the success of each student.
— We challenge our students and teachers to share the responsibility for learning.
— We challenge our students to exceed their own academic expectations.

Lead

— We enable students, faculty, and staff to become confident and responsible leaders.
— We lead with a clear sense of direction and purpose.
— We lead through best practice and educational innovation.
— We aspire to lead by example.

ZIS Learning Principles

The ZIS community shares the following Learning Principles:

We have a shared understanding of learning.
All students can and do learn. Learning is a purposeful process of extending conceptual understanding, mastering competencies, and developing character traits.

Everyone can learn how to learn.
When students learn how to learn, they become confident and independent, able to own, and direct their learning. Lifelong learning is a valuable skill.

Authentic contexts make learning meaningful.
Learning is more meaningful, engaging and enduring when students inquire into real world issues, dilemmas, and perspectives.

The quality of learning is more important than the quantity of content.
Content coverage alone does not equal learning. Extension of conceptual understanding, mastery of competencies, and development of character traits requires selective use of illustrative content.

Learning is personal.
Individuals have different starting points, different interests, and will follow different learning pathways. We personalize learning by providing appropriate challenge, choice, constructive feedback, and opportunities to act on that feedback.

Learning is social.
We learn from one another in safe environments when we are connected through positive, caring relationships. Interaction and collaboration form an important part of learning.

Everyone learns.
Our principles of learning apply to all members of the ZIS community.

ZIS Character Standards

The following character standards describe the dispositions and values we strive to promote and nurture amoung our community of learners.

Character Standards

Character Learning is happening when students are:

— considering the potential impact of applying dispositions and values in specific authentic contexts
— acting as a result of these considerations
— reflecting on the effects of these actions

Dispositions

Learners are OPEN-MINDED

They:

— initially withhold judgement, recognizing how past experiences influence reactions
— are receptive to information and ideas which may challenge their beliefs
— identify and investigate alternative perspectives
— attempt new ways of doing things

Learners are RESILIENT

They:

— recognize and manage distractions
— identify and use strategies for overcoming obstacles to achieve goals
— persevere through difficulties when it is productive to do so
— learn from failure or mistakes by reflecting and altering strategies for success
— formulate goals and work to attain them over sustained periods

Learners are PLAYFUL

They:

— take risks when approaching new situations and learning experiences
— creatively engage with ideas and materials, experimenting with them in novel and possibly counter-intuitive ways
— avoid drawing conclusions too soon
— explore imaginative alternatives and possibilities by wondering "what if?"

Learners are REFLECTIVE

They:

— think before acting, considering options for achieving a goal based on analysis of that goal
— monitor progress, make adjustments and adapt strategies appropriately whilst engaged in learning situations
— increase self-knowledge of strengths, weaknesses and areas for growth through considered reflection on particular strategies or actions used in learning situations

Values

Learners value INTEGRITY

They:

— identify and refine what they believe is right in light of our school's mission and values
— do what is right even when no-one is watching
— articulate how their beliefs influence their actions
— translate their beliefs into local and/or global actions
— recognize when their actions contradict their beliefs and reflect on why that discrepancy occurred

Learners value FAIRNESS

They:

— consider the impact of a decision or action on others
— recognize that fair does not always mean equal rather fairness depends on the circumstances and who is involved
— can make and justify a decision based on how fair it is for all concerned

Learners value COMPASSION

They:

— are able to sense other people's emotions and able to empathize
— actively attempt to understand why people hold certain perspectives, are in certain circumstances, and/or feel particular emotions
— feel motivated to relieve another person's suffering
— work to understand the needs of others in order to achieve desirable outcomes for all
— consider actions that will have a positive impact on others

School Year Calendar 2021/22

July (2021)

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

August

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
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2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

September

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20	21	22	23	24	25	26
27	28	29	30			

October

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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

November

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
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8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

December

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

January (2022)

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

February

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
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14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

March

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
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28	29	30	31			

April

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May

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23	24	25	26	27	28	29
30	31					

June

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
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20	21	22	23	24	25	26
27	28	29	30			

July

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Comments

2021

August 1: Swiss National Holiday
August 3: New faculty report
August 9: LS, MS, US, HoD and TL report
August 10: LS, MS, US returning faculty report
August 13: MS new student orientation
August 16: LS, US new student orientation
August 17: First day of classes for LS, MS, US

October 11–15: Fall break
October 18–19: No school, Professional Development Days (1 + 2)

November 19: No school

December 17: Last day of classes
December 20–31: Winter break I

2022

January 1–7: Winter break I
January 10: 2nd semester begins

February 14–18: Winter break II
February 21–22: No school, Professional Developments Days (3 + 4)

April 11–22: Spring break
April 17: Easter Sunday

May 1: May Day, Swiss Labor Day
May 26 & 27: No school, Ascension

June 4: US Graduation
June 6: No school, Pentecost (Whit Monday)
June 16: Last day of classes
June 17: Faculty work day

Color key:
- New and returning faculty report
- New student orientation
- Semester begins (first day of classes)
- Semester ends (last day of classes)
- No school
- Faculty work day
- US Graduation

Abbreviations:
EC = Early Childhood
LS = Lower School
MS = Middle School
US = Upper School
HoD = Head of Department
TL = Team Leader

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Graduation Requirements and Scheduling Information

Graduation Requirements

Graduation requirements are established and revised by the Upper School Administration in consultation with the faculty, and are subject to approval by the Board of Trustees. In order to qualify for the ZIS high school diploma a student must attend the Upper School for the full Grade 12 year or the full Grade 11 year and one semester of the Grade 12 year.

Course credits

Students must earn 23 credits to graduate. Each year-long course is worth one credit. Over four years, credits must be distributed as follows:

4	English
2	World Language (intermediate proficiency in at least one world language during Grades 9–12)
3	Social Studies
3	Mathematics
3	Science
2	Creative Arts
2	Physical Education
4	Electives (courses beyond required courses)
23	Credits

These are minimum credit requirements for the ZIS high school diploma. Most students exceed these requirements. Students enrolled in the IB Diploma Programme during Grades 11 and 12 must satisfy all requirements stipulated by the IB Organization in order to qualify for the IB Diploma.

Course Selection and Scheduling Process

Course Load

Bearing in mind that students must earn at least 23 credits to graduate, Grade 9 and 10 students usually enroll in a minimum of seven courses, and students in Grades 11 and 12 enroll in six courses. Students are encouraged to select a program of study that meets their ability-level, engages their interests, fulfills graduation requirements, and furthers their college/university admission and/or career objectives.

Course Request Process

The course selection process begins in February and concludes in March. The Counselors, the Assistant Principals, and faculty members assist students in the selection of appropriate academic courses. In conjunction with their parents, students enroll in classes by completing a Course Request Form. Schedules will be finalized in June.

Course Request Changes

Decisions regarding the courses offered, the number of sections of each course, staffing and scheduling are based on the data collected through Course Request Forms. As a result, is not always possible to accommodate changes once scheduling is complete.

Course Prerequisites

Some courses require that one or more specific courses be completed prior to enrollment. The first year of a cumulative subject, for example, is a prerequisite to the second year of the subject (e.g., French I is the prerequisite to French II). Prerequisites are indicated in course listings. Student performance in the prerequisite course should be considered indicative of future success.

Course Recommendation/Placement

Teacher recommendations based on student performance guide the selection of appropriate courses. If a student is not recommended for a course but wishes to enroll in the course, he/she should first talk to his/her current subject teacher and if necessary, appeal to the appropriate Curriculum Area Leader. Final decisions are made by the Principal, in conjunction with the family and the Curriculum Area Leader.

ZIS Academic Pathways

Students in Grades 9–12 must complete a rigorous and balanced program of studies in English, History, World Languages, Mathematics, Science, Creative Arts, and Physical Education/Health.

Academic Program in Grades 9 and 10

In Grades 9 and 10, courses have been created by Upper School teachers to ensure that students are well prepared to enroll in the International Baccalaureate Program, and access Advanced Placement (AP) courses or ZIS courses in Grades 11 and 12.

A typical course load for Grade 9 students includes:

— English*
— Mathematics
— Coordinated Science I
— History I
— Physical Education/Health
— German
— Elective 1**
— Optional: Elective 2 or study hall

A typical course load for Grade 10 students includes:

— English*
— Mathematics
— Coordinated Science II
— History II
— Physical Education
— Elective 1**
— Elective 2
— Optional: Elective 3 or study hall

* EAL students enroll in EAL as their English credit and take English 9 or English 10 as Elective 1.
** Students are encouraged to fulfill the Arts credit requirements during Grades 9 and 10.

Academic Pathways in Grades 11 and 12

In Grades 11 and 12 there are two pathways toward graduation: the ZIS and IB Diploma pathway, and the ZIS Diploma with AP and ZIS courses. Both of these options allow students to pursue their interests and challenge themselves and to meet the requirements for diverse university programs prepared for success in post-secondary education.

— **The ZIS and IB Diploma Pathway:** Students earn a ZIS Diploma by enrolling in seven classes and working toward the IB Diploma.

— **The ZIS Diploma with ZIS and AP Courses:** Students earn a ZIS Diploma by enrolling in a combination of AP courses and ZIS courses created by ZIS faculty. In some instances it is possible for students to enroll in individual two-year IB courses as well.

ZIS and IB Diploma Pathway

The International Baccalaureate Diploma Programme (IB) is a rigorous two-year pre-university program leading to assessments in six subject areas.

Established in 1968, the IB offers a challenging curriculum noted for its depth and its international perspective. The two-year IB Diploma provides a coherent and demanding educational experience across the full curriculum. Beyond completing university-level courses and examinations, IB students are also required to engage in community service, individual research, and an inquiry into the nature of knowledge.

What is the IB Diploma?

The International Baccalaureate Diploma, based upon best practices from national systems of education around the world, was designed to provide students with a rigorous and holistic education centered upon 21st century skills and global citizenship and resulting in an internationally recognized credential.

— Group 1 First Language
— Group 2 Second Language
— Group 3 Individuals and Societies
— Group 4 Experimental Sciences
— Group 5 Mathematics and Computer Science
— Group 6 The Arts

Students choose one course from each group, except Group 6, where students may elect to take a second course from Groups 1–4 instead of an Arts course. Three courses must be taken at the higher level (HL) and three courses at the standard level (SL). Higher level examinations are more demanding academically.

Other Requirements for the IB Diploma

In addition to six subject courses, Diploma candidates must fulfill three central requirements:

— Theory of Knowledge, an externally assessed course that examines how knowledge is produced, validated and evaluated in different disciplines
— Extended Essay, an externally assessed, independent research project of 4,000 words in one of the six subject areas
— Creativity, Activity, Service (CAS), regular involvement in artistic, physical and community service activities

Students who do not wish to enroll in the full IB Diploma may enroll in a combination of individual IB courses and will earn IB certificates in those subjects upon completion of the IB exam.

IB assessments are scored on a 1–7 scale, with up to three additional points available for exemplary work on Theory of Knowledge and the Extended Essay. To earn an IB Diploma, a student must achieve a minimum total score of 24 points without any failing conditions.

Generally speaking, the final IB grade of 1–7 consists of two major elements:

— Between 20 and 50 percent of the grade is based on internal assessment, classroom work done during the IB course and graded by IB teachers against specific published criteria.
— The remaining 50–80 percent of the grade is based on external assessment, which are developed by an international board of chief examiners, with input from IB teachers from around the world.

These criterion-based assessments are graded by an international body of trained IB examiners, consisting of university professors and master secondary school teachers. The work of the examiners is moderated by an examining board that is also responsible for ensuring that scoring is consistent across subjects and across the world.

How do colleges and universities recognize International Baccalaureate courses and the IB Diploma?

The IB Diploma has long been viewed as a strong indicator of academic promise and achievement. IB students often have an advantage in the admissions process at selective universities. In addition, IB courses and exams are recognized for the purpose of advanced credit and/or placement at more than 1,000 North American colleges and universities. Many institutions now grant a full year of credit to students who have earned the IB Diploma.

The IB Diploma is accepted as an admissions credential at universities in more than 102 countries. In addition, high scores on IB exams often entitle students to credit or placement at university. The IB Diploma Programme is offered at over 2,300 schools around the world.

ZIS Diploma with ZIS and AP Courses

Students select ZIS and AP courses to create a personalised two-year program of study. Graduation requirements ensure that the program is balanced, resulting in a well-rounded student, developing both academically capable and empathetic learners, aware of self and others in ethical interactions and decision making. Courses develop 21st century skills in critical and creative thinking and problem-solving, information literacy, collaboration and communication.

ZIS Courses

ZIS courses are one-year courses designed by ZIS faculty in each curricular area to develop conceptual understanding, content knowledge and skills. These courses are accessible to all students with support and extension as needed. They do not have the same time demands as AP courses, allowing students to balance their course load.

Advanced Placement (AP) Courses

The Advanced Placement Program (AP) enables willing and academically prepared students around the world to pursue university-level studies while still in high school. By taking AP courses, students demonstrate their mastery of a subject and their ability to work at the academic level required in higher education.

AP courses are developed by a committee of higher education faculty and expert AP teachers who ensure that the course reflects college- and university-level expectations. These committees define the scope and goals of the AP course, articulating what students should know and be able to do upon completing it. AP courses are fast-paced and intended to provide a broad survey of a particular discipline or subject area. Courses allow students to develop a global perspective, as well as critical thinking and problem-solving skills.

AP is recognized as a highly desirable academic credential around the globe: it is recognized in the admissions process by more than 4,000 universities worldwide, and outside the U.S., more than 600 universities in more than 65 countries recognize qualifying AP Exam scores. AP courses and exams measure students' mastery of university-level course content.

Who creates the AP Examinations, and how are the exams graded?

AP Examinations are created by a committee of experienced AP secondary school teachers and university professors specializing in each of the disciplines for which an examination is offered.

The multiple-choice portion of AP Exams is scored by computer. The free-response sections of AP Exams are scored by AP teachers and university professors in a week-long June scoring session. Detailed scoring rubrics are established for each examination by Chief Faculty Consultants for each discipline, who oversee the scoring of the free-response questions. Great care is taken by the Chief Faculty Consultants to ensure accuracy and consistency in scoring to result in a fair assessment of student free-response performances.

Total composite scores for the combined multiple-choice and free-response portions of the exams are

converted into AP grades of 1 (no recommendation) to 5 (extremely well qualified), which are released in mid-July to the students and the colleges and universities of their choice.

How do colleges and universities recognize AP courses?

Approximately 3,000 North American universities recognize AP courses and examinations. Students presenting qualifying grades on AP Exams may earn anywhere from 3 to 6 credits (for a single course) to one year of college credit, and on occasion, two years of credit, thereby earning second-year and sometimes third-year standing.

As universities in North American and abroad differ regarding the exact nature of their acceptance policies, AP students are advised to inquire directly to the universities concerning their respective policies for specific AP Examinations. AP courses and qualifying grades are also used as acceptance and admissions criteria by an increasing number of universities in identifying high performing and highly motivated students.

ZIS and IB Language Policy

Multilingualism is a tremendous asset in a globally interconnected world. ZIS requires students to study a language other than English for at least two years through language acquisition and mother tongue courses. Swiss law requires that all students study German until the end of Grade 9.

ZIS recognises that language develops along a continuum and organises the progression of language courses accordingly. The language acquisition track develops foreign language acquisition abilities up to the B2 level of the Common European Framework of Reference where language learners transition to the fluent speaker track.

In accordance with these principles…
Language Acquisition courses are intended for:
— Foreign language learners up to the B2 level

Fluent speaker courses are intended for:
— Native/mother tongue language students
— Non-mother tongue speakers who have reached near-native fluency (completion of CEFR B2 level)

IB Language Placement Policy Guidelines

According to the IB:
— Schools must develop a Language Policy consistent with IB expectations to place students who have complex language profiles, deciding which courses are best for their particular context according to available resources.
— A continuum of identified domains of language learning is used to plan pathways for student language development.
— The IB strongly recommends that, wherever possible, students should work towards developing their mother tongue(s).
— Language B is an additional language-learning [i.e. foreign language] course designed for students with some previous learning of that language.
— Language courses should be a challenging educational experience for the student. All final decisions on the appropriateness of the course for which students are entered are taken by coordinators in liaison with teachers using their experience and professional judgment to guide them.

IB Language B Placement Policy at ZIS

Language B is appropriately designated for foreign language learners; the content and method of approach required for Language B is not suited to the abilities and needs of fluent speakers. Neither will it be sufficiently challenging to fully develop their potential. In many cases, fluent speakers will have already met some of the intended outcomes for Language B or will easily meet these outcomes. While some schools do not have preparatory courses for fluent speakers, ZIS is fortunate to have the resources to be able to offer these courses in French, German and Spanish. Fluent speakers are not admitted to Language B.

Exceptions

When a fluent speaker student joins ZIS in Grade 10 or 11 and has not had the benefit of any academic classes in the language, consideration may be given for admission to Language B at the Higher Level. Applicants should seek approval from the Principal. The application will be reviewed by the Principal, IB Coordinator and the Curriculum Area Leader (CAL) for the World Language Curriculum Area. The committee's decision is final.

ab initio Language Placement

The language ab initio course is designed for students with little or no prior experience of the language they wish to study. All final decisions on the appropriateness of the course for which students are entered are taken by coordinators in liaison with teachers, using their experience and professional judgment to guide them. The most important consideration is that the language ab initio course should be a challenging educational experience for the student.

Course Offerings 2021/22

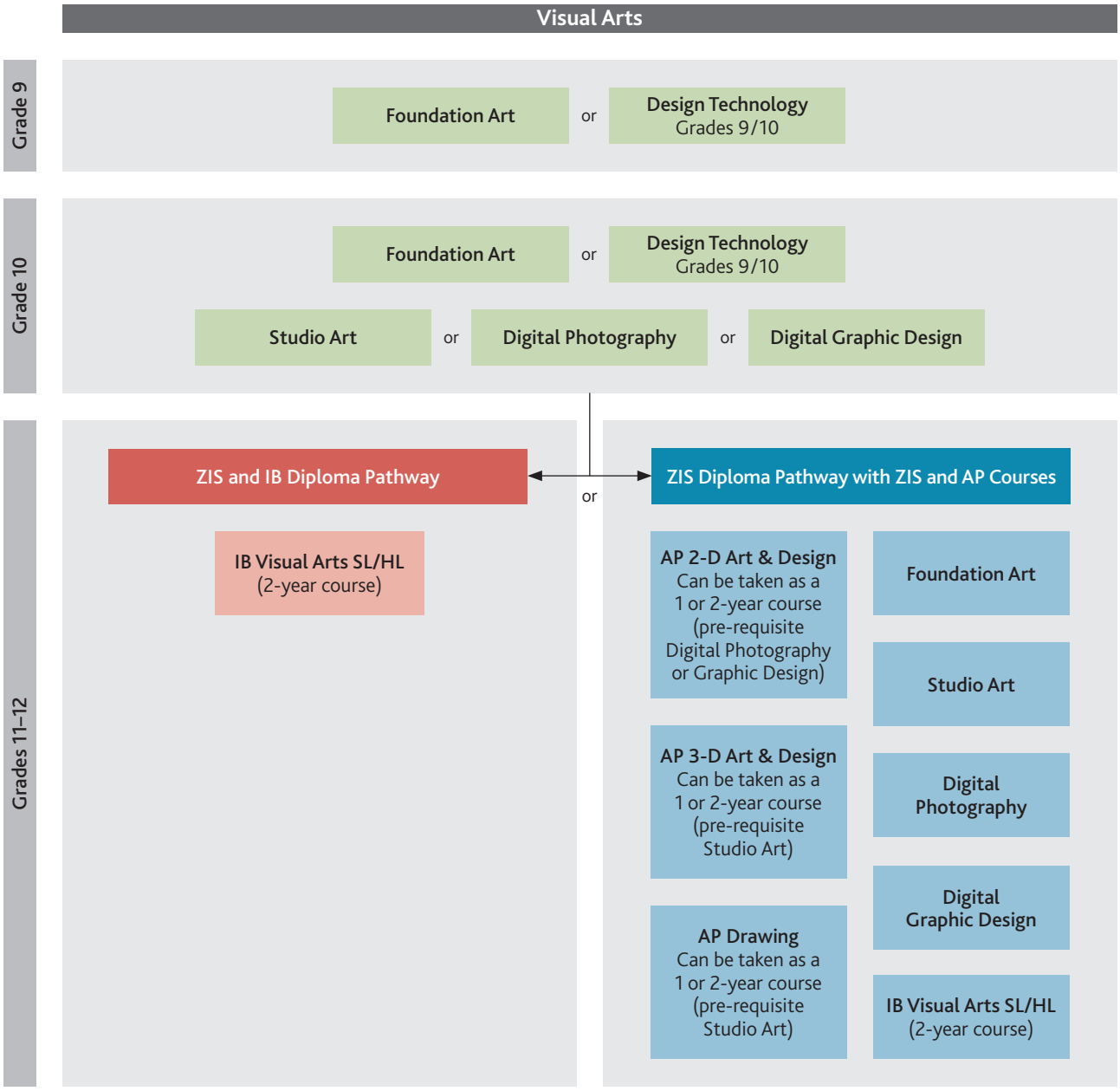
Please note: It should be understood that the viability of courses will be dependent upon student interest, available staffing, and timetable limitations.

Please note: On the following pages each course name is followed by one or more color codes:

- Grades 9 and/or 10 Courses
- ZIS and/or AP Courses
- IB Courses
- Electives

For your convenience these colors correspond to those used in the flowcharts and will help you locate the respective courses in the grade levels and/or academic pathways.

Creative Arts Curriculum Area (Visual Arts)



Grades 9 and/or 10 Courses | ZIS and/or AP Courses | IB Courses | Electives

Creative Arts Curriculum Area (Visual Arts)

Philosophy

The goal of the Creative Arts Curriculum Area is to involve students in the process of studying and producing Art, Music and Theater, to develop inquiring and knowledgeable young people able to locate their ideas within historical and cultural contexts. Theory and practice in the Arts are dynamic and constantly changing, challenging students to explore new possibilities for creative expression. Engagement in the Arts provides students with an opportunity to develop a critical and personal view of themselves in relation to the world.

Foundation Art and Design

Grades: 9–12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: None

This course aims to provide a firm foundation in the fundamentals of Art and Design. The curriculum provides a broad range of experiences utilizing the full range of media available in the Art department, including painting, drawing, graphic design, sculpture, digital software and photography. Students will acquire a wide range of two and three-dimensional skills, together with an understanding of the historical and cultural context relating to class themes. By the end of the course, students will have discovered their strengths and interests, which will be helpful in choosing one of the more specialized Art classes.

Studio Art

Grades: 10, 11 or 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Foundation Art and Design or another comparable Art class

Studio Art aims to provide a solid platform from which to move onto the more advanced Art classes. Over the course of the year, students will experience a variety of subjects and approaches to looking at art. Skills will be developed in a range of two and three-dimensional media, particularly drawing, painting and sculpture. Developing an understanding of the historical and cultural context relating to class themes will be an integral component of the curriculum. Successful completion of this course equips students to enroll in IB Visual Arts or AP Drawing.

Digital Graphic Design

Grades: 10, 11 or 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: None

This course looks at graphic design in a broad context, including the history of the subject with a focus on typography, layout, and two and three-dimensional solutions. Students will use Adobe Photoshop, In-Design and Illustrator on Macintosh computers and Epson printers. There will be opportunities to incorporate drawing, photography and 3-D applications. A variety of assignments will guide students through the design process, from generating ideas, working to a brief and refining/developing drafts into a finished project. Some projects include logos, magazine article/layouts, posters, infographics, and packaging, amongst others. Successful completion of this course equips students to enroll in IB Visual Arts or AP 2-D Art and Design.

Digital Photography

Grades: 10, 11 or 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: None

Digital Photography provides a thorough introduction to photography in color and black and white. It begins with the basics and concludes with a deeper consideration of photography as a form of art, looking at the context and meaning of images. The curriculum explores digital editing/processing possibilities using Adobe Lightroom and Photoshop. The main goal of the course is to develop a creative portfolio of digital photographs comparable in quality to printing from film. Successful completion of this course equips students to enroll in IB Visual Arts or AP Art 2-D Art and Design.

Required Materials:
A digital SLR camera with a large storage card (at least 32 GB) must be available to start the school year. The camera must be capable of taking pictures with manual exposure in RAW and JPEG file formats. A good comparison website for prices in Switzerland is www.toppreise.ch. For a list of camera recommendations please contact Keri Jolley at kjolley@zis.ch.

AP Drawing

Grades: 11 and/or 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Studio Art or teacher recommendation based on a review of a portfolio from a previous Art class

AP Drawing is a challenging course designed for students who have a serious interest in the subject. Works in any drawing/painting media are acceptable for this option, provided they conform to the specific requirements of the final portfolio regarding content and size. It is difficult to complete the exam portfolio in one year unless a candidate has already successfully completed a previous Art class and has a substantial collection of work, so many students choose to take the class over two years. At this level in order to be successful students must be prepared to develop an independent portfolio.

Design Technology

Grades: 9/10; Subject Area/Course Credit: Arts, 1 credit
Prerequisite: None
(For full description, please see page 34)

AP 2-D Art and Design

Grades: 11 and/or 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: To enroll in the photography concentration of AP 2-D Art and Design, it is essential that a student complete the Digital Photography course prior to or in conjunction with AP 2-D. To enroll in the graphic design concentration it is essential that a student complete the Digital Graphic Design course prior to AP 2-D.

AP 2-D Art and Design is a challenging course designed for students who have a serious interest in the subject. Photography and graphics are acceptable for this option, provided they conform to the specific requirements of the final portfolio regarding content and size. It is possible to take the exam in one year if a candidate has previously completed the photography or digital graphic design classes and has a strong collection of work. Alternatively, some students prefer to take the class over two years after completing the photography or digital graphic design course. At this level in order to be successful students must be prepared to develop an independent portfolio based upon a theme of their choice.

Required Materials:
Students taking the 2-D syllabus and entering a photography portfolio will require a digital SLR camera with a large storage card (at least 32 GB). It must be capable of taking pictures with manual exposure in RAW and JPEG file formats.

AP 3-D Art and Design

Grades: 11 and/or 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Studio Art or teacher recommendation based on a review of a portfolio from a previous Art class

AP 3-D Art and Design is a challenging course designed for students who have a serious interest in the subject. Works in any sculptural media are acceptable for this option, provided they conform to the specific requirements of the final portfolio. It is difficult to complete the exam portfolio in one year unless a candidate has already successfully completed a previous Art class and has a substantial collection of work. Many students choose to take the class over two years. At this level in order to be successful students must be prepared to develop an independent portfolio.

IB Visual Arts SL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Creative Arts, 1 credit each year
Prerequisite: Teacher recommendation.

Although it is preferable and advantageous to have successfully completed a previous Art class, it is not a requirement for SL. With strong motivation it may be possible to succeed with a limited background in the subject at this level.

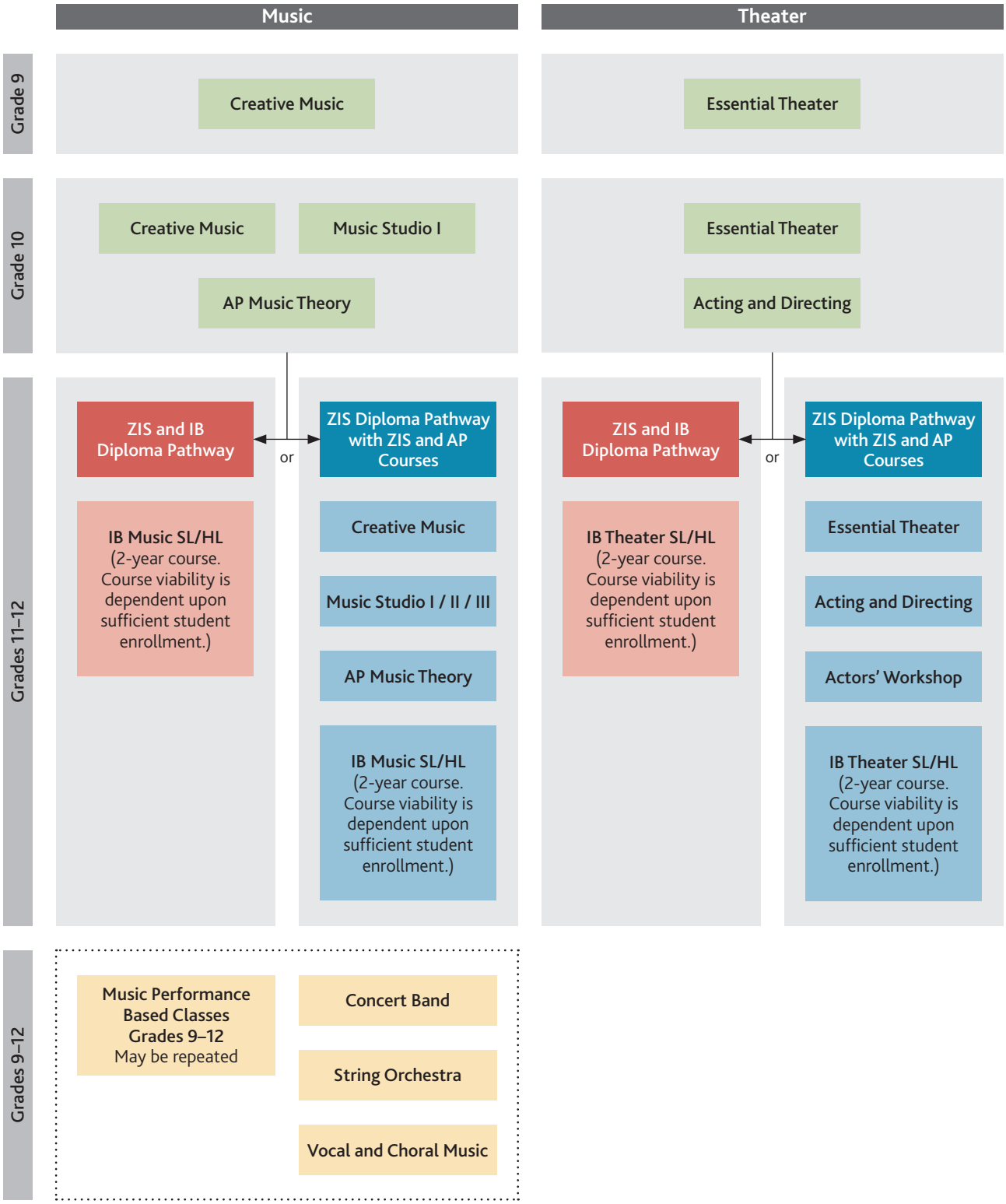
IB Visual Arts SL is a two-year course designed for students who have a serious interest in the subject. Students are required to curate an exhibition of their own art at the end of the course, using any of the media available within the Art Curriculum Area, such as photography, sculpture, drawing and painting. They must also document the development of the portfolio in an Art Journal and complete a Comparative Study focusing on selected artworks by several different artists. In the second year, emphasis is placed on independent research as students explore their personal themes in greater depth.

IB Visual Arts HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Creative Arts, 1 credit each year
Prerequisite: Teacher Recommendation. Successful completion of a previous Art class is strongly advised to consider this course at the Higher Level

IB Visual Arts HL is a two-year course designed for students who have a serious interest in the subject. Students are required to curate an exhibition of their own art at the end of the course, using any of the media available within the Art Curriculum Area, such as photography, sculpture, drawing and painting. They must also document the development of the portfolio in an Art Journal and complete a Comparative Study focusing on selected artworks by several different artists. In the second year, emphasis is placed on independent research as students explore their personal themes in greater depth.

Creative Arts Curriculum Area (Music and Theater)



Creative Arts Curriculum Area (Music and Theater)

Essential Theater

Grade: 9
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: None

Essential Theater is an introductory course designed to give students a sampling of what the theater has to offer. The course covers both work on stage and backstage. Students are exposed to acting and to the history of theater through scripted work and improvisation. Through readings, workshops and games students learn how theater has different styles and how these styles require different acting techniques. The course involves individual and group work. At the end of the course students perform for a live audience to apply the skills and techniques acquired during the year.

Acting and Directing

Grades: 10, 11 or 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Essential Theater, another beginning acting course or teacher recommendation

Acting and Directing is an advanced Theater Studies course allowing students to undertake individual and group presentations and workshops in new styles of theater. The role of the designer in theater is examined and a project is chosen from set, costume, or lighting design. Additionally, increased emphasis is placed on direction. Students work on small to medium scale productions developing their skills and controls as the director of a show. At the end of the course students perform for a live audience to apply the skills and techniques acquired during the year.

New! Actors' Workshop

Grade: 11 or 12
Subject Area/Course Credit: Creative arts 1 credit
Prerequisite: Acting and Directing or other advanced theater courses or teacher recommendation.

This is a one-year course that is designed to provide students with the opportunity to create original theater in a collaborative setting. Students develop personal and aesthetic theater skills and engage actively in the creative process, transforming ideas into action as inquisitive and productive artists. The course emphasizes the importance of working both individually and collaboratively. This course also provides students with directing and research skills.
Note: This course will run concurrently with IB Theater Arts SL/HL.

IB Theater Arts SL/HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Creative Arts, 1 credit each year
Prerequisite: Acting and Directing, other advanced theater course or teacher recommendation

IB Theater Arts SL and HL is a two-year course designed to develop personal, academic, aesthetic and practical theater skills and learn to understand the holistic nature of theater. Year 1 focuses on the skills and experiences required for Year 2. In Year 2 students prepare projects for grading. The three main focus areas of study are Theater in Context, Theater Processes, and Presenting Theater. The students will engage actively in the creative process, transforming ideas into action as inquisitive and productive artists. The course emphasizes the importance of working both individually and collaboratively as part of an ensemble. Students are asked to consider the cultural influences of theater, to go beyond the scripted page as an actor, director, or designer and experience theater as the audience. Students will take on the role of the Dramaturge and gain an understanding of the valuable role of research in the development of productions. There are three Projects in total for both SL and HL as part of the assessment for IB Theater.
Note: HL students must present a solo theater piece in this course, which will be their fourth project for assessment.

Creative Music

Grades: 9, 10, 11, and 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: None, though previous music experience and enjoyment of music of any kind supports the curriculum

Creative Music is an introductory level project-based course that enables students to create and explore music through a wide range of activities, and develop an understanding of how the elements of music create impact and emotion in composition and performance. Using current music technologies such as Noteflight and GarageBand, students compose melodies, explore sound effects and film scoring, compose raps, work with MIDI, and learn the basics of mixing, production, and recording. Learning basic guitar skills during the course allows students to explore rock and pop melodies and harmonies, as well as performance and songwriting. Students will share work in class and learn to respond to the work of others. Students will engage in several independently-designed projects where they can delve into their personal musical interests.
Note: Students who successfully complete this course will be prepared for Music Studio I and may be considered for IB Music or AP Music Theory.

Music Studio I

Grades: 10, 11, and 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Creative Music or teacher recommendation

Music Studio I is an intermediate level project-based course that enables students to create, perform, and respond to music in a variety of ways. Students can choose to work in groups or independently, to create, perform, and/or produce music of various styles. Students will deepen their knowledge and understanding of rhythm, meter, melody, harmony and form, while building these elements into both their performance and/or production projects. Students will share work in class, as well as respond to works and recordings made by professional composers and artists, and learn to give feedback based on their growing knowledge of musical elements.
Note: Students who successfully complete this course will be prepared for Music Studio II and may be considered for IB Music or AP Music Theory.

Music Studio II

Grades: 11 and 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Music Studio I and teacher recommendation

Music Studio II builds on foundational concepts learned in Music Studio I, with a focus on producing a concept album for the year, while also beginning to investigate aspects of different World Music traditions. Students will continue to further their music theory knowledge, as well as explore more complex research methods through looking into composers and influential musicians of the past and present who have shaped music as we know it today. Students may also choose to further their knowledge and practice on one or more instruments or music technology tools. They will share work in class, as well as provide feedback based on their musical knowledge. They will also learn about peer mentoring and teaching. Students who successfully complete this course will be prepared for Music Studio III and may be considered for AP Music Theory.

Music Studio III

Grade: 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Music Studio II and teacher recommendation

Music Studio III is a focused, student-led and teacher-coached, in-depth study of musical topics and challenges chosen by each participating student individually. Students will work towards personally developed musical goals such as competitions, auditions, examinations, college-study programs, performances, and demo record production under the coaching and mentoring of the course instructor. Students will further their knowledge in music theory and history, in order to be able to understand the complexities of the musical works they are studying, performing, and producing. Students will be required to perform/share, as well as journal their process throughout the year. They will also lead a small in-class end of year seminar session/mini lecture-recital based on their learnings.

Concert Band

Grades: 9, 10, 11, and 12. This course can be taken over multiple years.
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Students in Concert Band usually have at least three years of experience on their instrument and have the ability to read music. The following instruments make up the Concert Band: Flute, Oboe, Clarinet, Bassoon, Saxophone, French Horn, Trumpet, Baritone, Euphonium, Trombone, Tuba, and Percussion. Students must rent or own their own instrument

Concert Band is a performance-based course that concentrates on technical and expressive skills in an ensemble-focused setting. ZIS instrumental ensemble members create and experience music in a group, while developing an understanding of their individual contributions. The Band performs a large repertoire of musical styles for varied audiences. Participation in Concert Band performances is a required part of this course. Concert Band members also have the opportunity to mentor younger musicians at the Lower School. Advanced members of the group may prepare an audition for the AMIS International Honor Band Festival or the WER Honor Band.
Note: Students who successfully participate in this course may be considered for IB Music or AP Music Theory.

String Orchestra

Grades: 9, 10, 11, and 12. This course can be taken over multiple years.
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Students in String Orchestra usually have at least three years of experience on their instrument and have the ability to read music. The following instruments make up the String Orchestra: Violin, Viola, Cello, and Double Bass. Students must rent or own their own instrument

String Orchestra is a performance-based course that concentrates on technical and expressive skills in an ensemble-focused setting. ZIS instrumental ensemble members create and experience music in a group, while developing an understanding of their individual contributions. The Orchestra performs a large repertoire of musical styles for varied audiences. Participation in String Orchestra performances is a required component of this course. String Orchestra members also have the opportunity to mentor younger musicians at the Lower School. Advanced

members of the group may prepare an audition for the AMIS International Honor Orchestra Festival.
Note: Students who successfully participate in this course may be considered for IB Music or AP Music Theory.

Vocal and Choral Music

Grades: 9, 10, 11, and 12. This course can be taken over multiple years.
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Enjoy singing, group collaboration and want to improve!

Vocal and Choral Music is designed for the student who enjoys singing or wants to challenge themselves to learn more about the singing voice and using their body as an instrument. It has a strong performance/presenting component, including both in-class and public performances. Students will work on healthy vocal technique, while being challenged to learn and perform a wide variety of vocal and choral music, from classical to pop, jazz, traditional, and world music, in a variety of languages. Students will have the opportunity to exercise team-building skills as they work in both large and small ensembles, exploring both set compositions, as well as beginning to create vocal improvisations and harmonies. Students will work towards building their vocal and performance confidence. They will learn to respond and use their critical thinking skills through in-class sharing and feedback sessions. Students will look at singing features of their favourite artists, learning to identify components of those artists' singing techniques, and connect this to understanding how they produce their singing voices. Students may be eligible to audition for the AMIS International Honor Choir Festival or the WER Honor Choir.
Note: Students who successfully participate in this course may be considered for IB Music or AP Music Theory.

AP Music Theory

Grades: 10, 11, and 12
Subject Area/Course Credit: Creative Arts, 1 credit
Prerequisite: Teacher recommendation. Previous music experience, whether in a school setting or through private studio instruction, is desirable.
The College Board states that "the student's ability to read and write musical notation is fundamental to the course. It is also strongly recommended that the student will have acquired at least basic performance skills in voice or on an instrument."

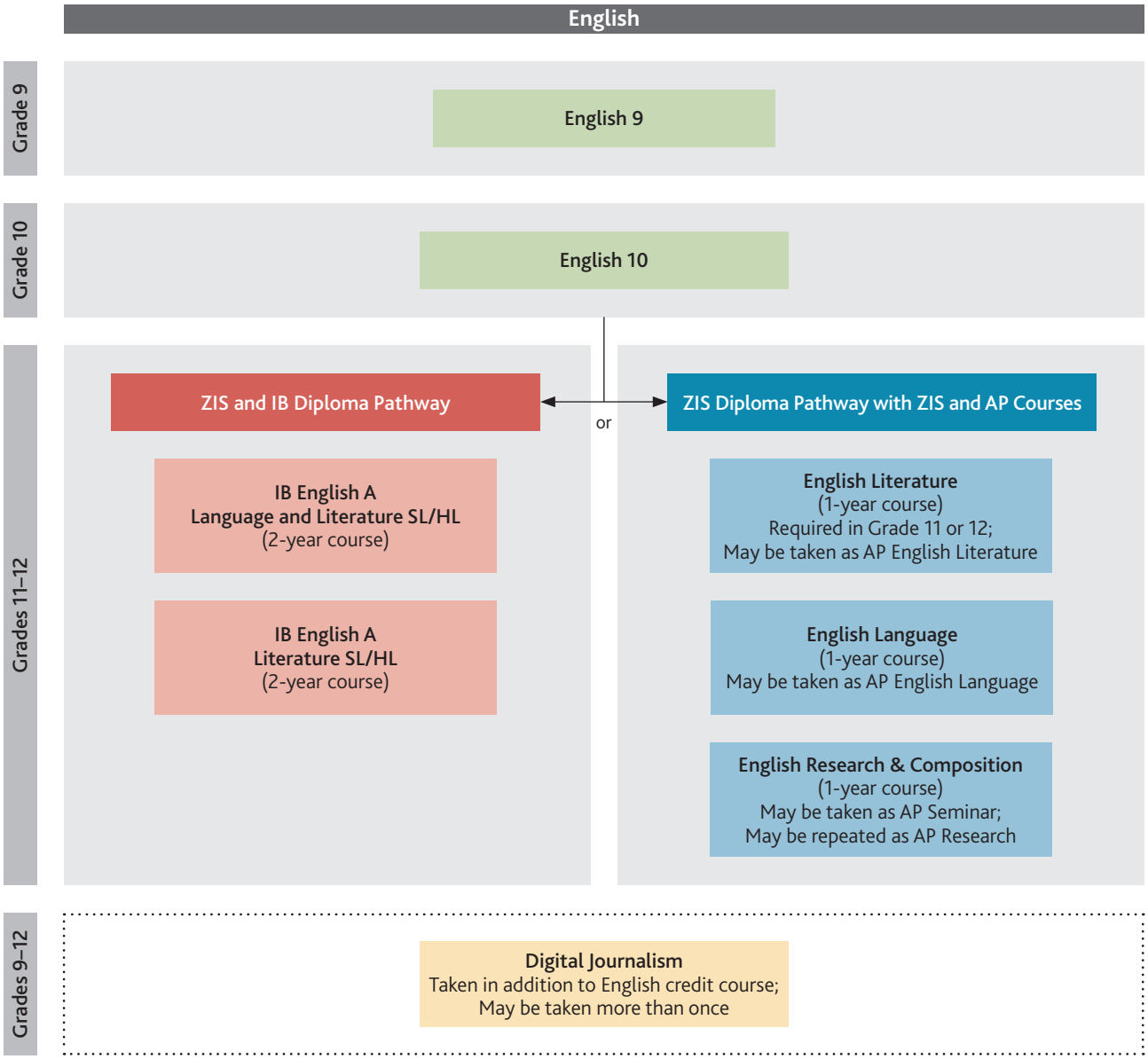
AP Music Theory is comprised of the material usually found in a first-year university course in Music Theory and Musicianship. The goal of the course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. To achieve this, the course focuses on developing the student's aural, sight-singing, written, compositional, and analytical skills. Musicianship skills such as dictation, sight-singing and keyboard harmony are also important parts of the course.

IB Music SL/HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Creative Arts, 1 credit each year
Prerequisite: Experience with composing, producing, or performing on an instrument or voice highly recommended. Students who take private lessons, are in a music ensemble, have prepared theory exams, or have taken composition classes are often good candidates.

The IB Music Program is designed for the passionate musician. It is an exciting opportunity for composers and performers to take a deep dive into all aspects of music by exploring, performing, and creating. The new IB Music curriculum is inclusive of students with wide-ranging personal and cultural musical backgrounds. Students in the new course will personalise unique approaches to musical forms, genres and pieces. The exploration of diverse musical material is focused through the lenses of four areas of inquiry: music for sociocultural and political expression; music for listening and performance; music for dramatic impact, movement and entertainment; and music technology in the digital age. Students will leave the course with an understanding of the complete musician. They will gain confidence in the essential processes associated with music-making and develop as holistic musicians with experience as creators and performers.

English Curriculum Area



Grades 9 and/or 10 Courses | ZIS and/or AP Courses | IB Courses | Electives

English Curriculum Area

Philosophy

The goal of the English Curriculum Area is to create literate, inquisitive learners who can successfully negotiate an increasingly complex, information-rich world. Students will acquire and refine specific skills and strategies in reading, writing, speaking, listening, and viewing and will use these skills and strategies widely as tools for learning and creative response. Exploring a variety of texts and genres, students will understand and appreciate language, literature, and media as catalysts for deep reflection and inspiration.

English as an Additional Language (EAL)

Grades: 9 and/or 10
Subject Area/Course Credit: English, 1 credit
Prerequisite: English fluency placement test, or teacher recommendation

English as an Additional Language (EAL) is an intermediate language and literature course that strengthens listening, reading, speaking and writing skills in English. Support and strategies will be offered to allow the student to cope better in each of their core courses like social studies, science, and English. Students will focus on academic writing skills, reading strategies, oral presentations, grammar structures, and the expansion of vocabulary. Some class time will also be devoted to helping students approach certain assignments given in other courses.

English 9

Grade: 9
Subject Area/Course Credit: English, 1 credit
Prerequisite: English 8

English 9 is organized around concepts that allow students to make connections between themselves, texts, and the world around them. This foundational course cultivates reading, writing, listening and speaking skills. Students will read a variety of literary genres in order to understand critical literary concepts for analysis and interpretation. Students also learn key steps in the research process, including evaluating sources for their credibility and synthesizing multiple sources.

English 10

Grade: 10
Subject Area/Course Credit: English, 1 credit
Prerequisite: English 9

English 10 explores elements of language and its use through the study of literature, nonfiction, and media. Emphasis is placed upon close critical reading with attention to a range of literary and rhetorical devices. Students develop their process writing skills, from planning to revision, with increased emphasis on the academic style necessary for subsequent study. Students also develop research skills through planning and writing a synthesis essay.

English Literature / AP English Literature

Grades: 11 and 12
Subject Area/Course Credit: English, 1 credit
Prerequisite: English 10

English Literature engages students in the careful reading and interpretation of a range of literary works including the novel, short story, poetry and drama based on a careful observation of textual details, considering such elements as the use of figurative language, imagery, symbolism and tone. Furthermore, the course will focus on how to construct effectively written responses which reflect a clear understanding of the literary piece; recognize complexities of attitude or tone; demonstrate stylistic maturity through the command of sentence structure, diction and organization of ideas; construct an insightful thesis clearly linked to the evidence or assertions presented; seamlessly incorporate quotations and maintain a consistent focus. This course can be taken in Grade 11 or 12. Successful completion of English Literature supports post-secondary academic study. This course prepares students to take the AP Literature and Composition exam, if they so choose.

English Language / AP English Language

Grades: 11 and 12
Subject Area/Course Credit: English, 1 credit
Prerequisite: English 10

English Language prepares students to become skilled readers of a wide variety of nonfiction texts. Students will write analytical and persuasive essays, including those that synthesize arguments from other sources. The goal of the course is to develop mature, discerning readers and writers with a strong awareness of how an author's rhetorical choices interact with purpose and audience. This course can be taken in Grade 11 or 12. Successful completion of English Language supports post-secondary academic study. This course prepares students to take the AP Language and Composition exam, if they so choose.

English Research and Composition / AP Seminar / AP Research

Grades: 11 and 12
Subject Area/Course Credit: English, 1 credit
Prerequisite: English 10

English Research and Composition explores the complexities of academic and real-world issues through the analysis of divergent perspectives. Using an inquiry framework, students examine a variety of text types to develop an understanding of how to effectively structure arguments and to develop their skills in assessing the

credibility of authors and their evidence. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. This course prepares students to take the AP Seminar exam, if they so choose.

English Department IB Language Placement Policy
All students taking IB English courses at ZIS are enrolled in Language A. In accordance with IB guidelines for language placement:

Language A courses are intended for the following students:
— Mother tongue English speaker.
— Non mother tongue speakers who have reached near mother tongue ability.

IB English A: Literature SL
Grades: 11–12 (two-year course)
Subject Area/Course Credit: English, 1 credit each year
Prerequisite: English 10 and Teacher Recommendation

English A: Literature SL focuses exclusively on literary texts, adopting a variety of approaches to textual criticism. Students explore the nature of literature, the aesthetic function of literary language and textuality, and the relationship between literature and the world. The syllabus is divided over two years and embraces prose, poetry and drama. Some of the studied texts are written originally in English while other texts are in translation. In addition to two exam papers and one oral assessment, students will engage in regular journal reflections and assessments to build skills mastery.

IB English A: Literature HL
Grades: 11–12
Subject Area/Course Credit: English, 1 credit each year
Prerequisite: English 10 and teacher recommendation

English A: Literature HL focuses exclusively on literary texts, adopting a variety of approaches to textual criticism. Students explore the nature of literature, the aesthetic function of literary language and textuality, and the relationship between literature and the world. The syllabus is divided over two years and embraces prose, poetry and drama. Some of the studied texts are written originally in English while other texts are in translation. In addition to two exam papers, one oral assessment and one revised essay, students will engage in regular journal reflections and assessments to build skills mastery.

IB English A: Language and Literature SL
Grades: 11–12 (two-year course)
Subject Area/Course Credit: English, 1 credit each year
Prerequisite: English 10 and teacher recommendation

English A: Language and Literature SL focuses on the relationship between texts, readers, and the world around them. As indicated by the two names of this course, students will develop analysis skills in fiction and nonfiction and communication skills in speech and writing. We will explore how writers and readers shape meaning, how texts evolve in time and place, and the relationship found between texts. The syllabus includes a range of texts to build critical awareness of style and form in both literary and non-literary texts. In addition to two exam papers and one oral assessment, students will engage in regular journal reflections and assessments to build skills mastery.

IB English A: Language and Literature HL
Grades: 11–12 (two-year course)
Subject Area/Course Credit: English, 1 credit each year
Prerequisite: English 10 and teacher recommendation

English A: Language and Literature SL focuses on the relationship between texts, readers, and the world around them. As indicated by the two names of this course, students will develop analysis skills in fiction and nonfiction and communication skills in speech and writing. We will explore how writers and readers shape meaning, how texts evolve in time and place, and the relationship found between texts. The syllabus includes a range of texts to build critical awareness of style and form in both literary and non-literary texts. In addition to two exam papers, one assessment, and one revised essay, students will engage in regular journal reflections and assessments to build skills mastery.

English Electives

Digital Journalism I

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: Elective, 1 credit
Prerequisite: None

Digital Journalism I is designed for students who wish to learn a wide range of journalistic skills. The course serves as an introduction to serious journalism, developing students' awareness of the conventions of writing and multimedia news, opinion, features, and investigative reports. Students will publish their own work on personal blogs as well as in the student newspaper, The Lion's Journal. Additionally, students hone personal communications skills through teamwork and cooperation on projects and shared publications. Students will develop a digital portfolio of their writing in a range of text types including news articles, features, op-eds, podcasts and short video documentaries.

Digital Journalism II

Grades: 10, 11 or 12
Subject Area/Course Credit: Elective, 1 credit
Prerequisite: Digital Journalism I or Lion's Journal Club participation

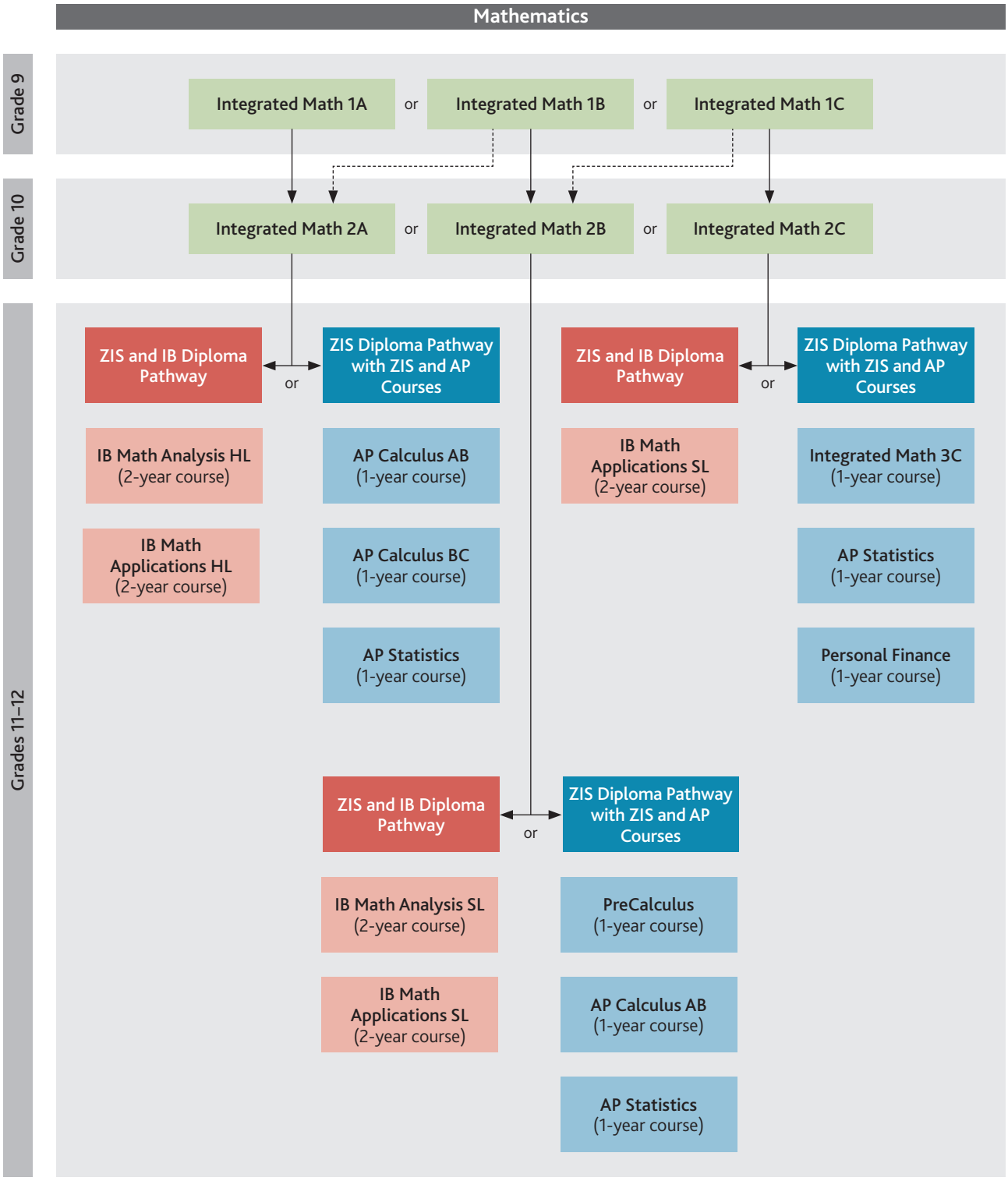
Digital Journalism II builds on foundational concepts learned in Introduction to Digital Journalism with a focus on the operation and management of the student newspaper, The Lion's Journal. Students in this class will work with members of the Newspaper Club in order to assign, manage, edit, and publish a variety of media content. Digital Journalism: Editing and Publishing provides an authentic learning experience through hands-on journalism and a real leadership opportunity.

Digital Journalism III

Grades: 11 or 12
Subject Area/Course Credit: Elective, 1 credit
Prerequisite: Digital Journalism 2

Digital Journalism III offers a student-centered opportunity for students to delve deeply into areas of expertise and passion developed over previous coursework. Additionally, students in this course will lead production of the student newspaper, The Lion's Journal, and help students in the other digital journalism courses and the Newspaper Club improve their skills by editing and providing feedback. This course also seeks to channel student creativity into digital media production and publication.

Mathematics Curriculum Area



Grades 9 and/or 10 Courses | ZIS and/or AP Courses | IB Courses | Electives

Mathematics Curriculum Area

Philosophy

The mission of the Mathematics Curriculum Area is to implement a balanced and rigorous instructional program that provides ALL students with the opportunities, experiences and resources to be successful. The expectation is that ALL students will become proficient in basic computational and procedural skills, develop conceptual understanding, and become adept problem solvers. The goals of the Mathematics Curriculum Area are twofold:

— To implement a coherent, school-wide conceptual and standards-driven mathematics program.
— To provide instructional and professional support to all teachers, so that ALL students will achieve proficiency and have the prerequisite skills for advanced mathematics courses.

These goals are supported strategically through four program components:

1. The development and use of grade-specific instructional units.
2. The support of teachers with targeted professional development and a commitment to working with external consultants.
3. The use and analysis of formative periodic assessments.
4. The use of assessment data to focus and implement immediate intervention where students most need help.

Integrated Mathematics 1A

Subject Area/Course Credit: Mathematics, 1 credit
Prerequisite: Mathematics 8 Honors and/or teacher recommendation

Integrated Mathematics 1A is a rigorous mathematics course intended for students who have excelled in mathematics in the past and are highly motivated to take either of the IB HL Math courses or AP Calculus AB in their Grade 11 year. The foundations of algebra, including linear and quadratic functions, are reviewed and extended and it is expected that students who enroll in this class have a solid algebra background and are prepared to move quickly into abstract generalization and use sophisticated communication skills. Principles of geometry are connected to trigonometry (including non-right triangles) and probability, statistics, and sets are all introduced.

Integrated Mathematics 2A

Subject Area/Course Credit: Mathematics, 1 credit
Prerequisite: Integrated Math 1A or teacher recommendation

Integrated Mathematics 2A is a rigorous mathematics course intended for students who have excelled in mathematics in the past and are highly motivated to take either of the IB Math HL courses or AP Calculus AB in their Grade 11 year. This course assumes a solid base in algebra and knowledge of the basics of geometry. Linear and quadratic algebra is reviewed and expanded upon, and more sophisticated topics such as exponentials, sequences and series, inverses and logarithms are introduced. Principles of trigonometry are extended to their functions, identities, and equations. Other topics such as probability and statistics are extended.

Integrated Mathematics 1B

Subject Area/Course Credit: Mathematics, 1 credit
Prerequisite: Mathematics 8 or teacher recommendation

Integrated Mathematics 1B is a course in which foundations of algebra are reviewed and extended and algebraic concepts progress from linear functions to quadratic functions and their applications. Principles of geometry are connected to similarity and right-triangle trigonometry and probability, exponents, statistics and sets are all introduced. Throughout these main topics, an emphasis is placed on communicating mathematics and understanding the mathematical concepts behind each new skill.

Integrated Mathematics 2B

Subject Area/Course Credit: Mathematics, 1 credit
Prerequisite: Integrated Math 1B or teacher recommendation

Integrated Mathematics 2B is a course that assumes students have a solid base in algebra and knowledge of the basics of geometry. Linear and quadratic algebra is reviewed and expanded upon, and more sophisticated topics such as exponentials, inverses and logarithms are introduced. Principles of geometry are expanded upon and connected to trigonometry on both right and non-right triangles. Topics such as probability and statistics are expanded upon.
Note: Students who successfully complete this course are qualified to enter IB Math SL or PreCalculus.

Integrated Mathematics 1C

Subject Area/Course Credit: Mathematics, 1 credit
Prerequisite: Math 8 teacher recommendation or Upper School teacher referral

Integrated Mathematics 1C is a course in which foundations of algebra are both reinforced and extended. These algebraic concepts are integrated with principles of geometry at a more deliberate pace than in the Integrated Mathematics 1B course. Students will study Sets, 3-D Geometry, Linear Algebra, Factoring, Coordinate Geometry, Probability and Statistics, and Right Triangle Trigonometry. Throughout these main topics, an emphasis is placed on communicating mathematics, using technology, and understanding the mathematical concepts behind each new skill.

Integrated Mathematics 2C

Subject Area/Course Credit: Mathematics, 1 credit
Prerequisite: Integrated Math 1C or Upper School teacher recommendation

Integrated Mathematics 2C is a course that assumes students have a foundation in algebra and knowledge of the basics of geometry. Linear equations are reviewed and expanded upon, and more sophisticated topics such as quadratic functions are introduced. Right triangle trigonometry will be revisited and extended to both non-right triangle trigonometry and trigonometric functions. These algebraic concepts are integrated with principles of geometry at a more deliberate pace than in the Integrated Mathematics 2B course. Throughout these main topics, an emphasis is placed on communicating mathematics, using technology, and understanding the mathematical concepts behind each new skill.
Note: Students who successfully complete this course are qualified to enter IB Math Applications and Interpretations or Integrated Mathematics 3C.

Integrated Mathematics 3C

Subject Area/Course Credit: Mathematics, 1 credit
Prerequisite: Integrated Math 2C or Upper School teacher recommendation

Integrated Mathematics 3C is a course that assumes students have a solid foundation in algebra and knowledge of the basics of geometry. Operations on functions are reviewed and extended to more sophisticated topics such as exponential and logarithmic functions. Statistics will be studied in depth during this course. Throughout these main topics, an emphasis is placed on communicating mathematics, using technology, and understanding the mathematical concepts behind each new skill.
Note: Students who successfully complete this course are able to enroll in Personal Finance or AP Statistics (with teacher recommendation).

PreCalculus

Subject Area/Course Credit: Mathematics, 1 credit
Prerequisite: Integrated Math 2B or 2A

PreCalculus is a rigorous one year course intended as preparation for AP Calculus AB course. PreCalculus may also serve as a final Mathematics course for Grade 12 students, allowing them to hone their skills before entering university. The course provides an in-depth analysis of functions, including polynomial, rational, exponential, logarithmic, and trigonometric. Emphasis is placed on developing critical thinking and problem-solving skills and strengthening algebraic manipulation skills. An introduction to calculus is covered through the lens of limits.

Personal Finance

Subject Area/Course Credit: Mathematics, 1 credit

Personal Finance is offered at the 11th or 12th-grade levels. This course will not be a traditional math class in its presentation. Assessments will be project-based and focus more on presentations. Students will be exposed to numerical and financial ideas which they are most likely to encounter in their lives. Such topics as credit and credit cards, taxes and tax structure, mortgages, retirement planning, investing, actively managed mutual funds, exchange-traded funds (ETFs), stocks, bonds, games of chance, statistics in sports, data presentation and spreadsheets, basic accounting principles and more.

AP Calculus AB

Subject Area/Course Credit: Mathematics, 1 credit
Prerequisite: PreCalculus or Integrated Math 2A

AP Calculus AB is designed to be the equivalent of a Level I general Calculus course usually taken during the first year of university in the United States and prepares students to take the AP Calculus AB exam in May. The course presupposes a strong grounding in Algebra, Trigonometry and Functions. Differential and integral Calculus are approached analytically, geometrically, numerically and verbally. A range of methods and applications is studied. The specific topics of the course are detailed in the AP Calculus AB course description produced by the College Board.

AP Calculus BC

Subject Area/Course Credit: Mathematics, 1 credit
Prerequisite: AP Calculus AB or teacher recommendation

AP Calculus BC is designed to be the equivalent of a Level II Calculus course taken at university in the United States and prepares students to take the AP exam in May. The course presupposes a passing grade in the AP Calculus AB course. Further study of differentiation and integration is approached analytically, geometrically, numerically and verbally. A more advanced range of applications and methods is studied. The specific topics of the course are detailed in the AP Calculus BC course outline, available on the College Board website.

AP Statistics

Subject Area/Course Credit: Elective, 1 credit
Prerequisite: Integrated Math 2A, Integrated Math 2B, Integrated Math 3C or PreCalculus

AP Statistics is designed to be the equivalent of the general Statistics course usually taken during the first year of university in the United States and prepares students to take the AP exam in May. The goal of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns and Statistical Inference.

IB Mathematics SL, Applications and Interpretations

Grades: 11–12 (two-year course)
Subject Are / Course credit: Mathematics, 1 credit each year
Prerequisite: Applied Math 10, Integrated Math 2C, Integrated Math 2B or Integrated Math 2A

IB Applications and Interpretations SL is a two-year course designed to prepare students for the IB exam at the end of the second year. During the two years, students will cover a variety of topics including the representation of numbers in a variety of ways, functions, geometry and trigonometry, statistics and probability, and calculus. This course focuses on using math to model situations and describe our world, and solving problems using the power of technology. Students will complete an independent exploration of their choosing using topics learned in the course.

IB Mathematics HL, Applications and Interpretations

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Mathematics, 1 credit each year
Prerequisite: Integrated Math 2A

IB Applications and Interpretations HL is a very rigorous two-year course designed to prepare students for the IB exam at the end of the second year. During the two years, students will cover a variety of topics including the representation of numbers in a variety of ways, functions, geometry and trigonometry, statistics and probability, and calculus. This course focuses on using math to model situations and describe our world, and solving problems using the power of technology. Students will complete an independent exploration of their choosing using topics learned in the course.

IB Mathematics SL, Analysis and Approaches

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Mathematics, 1 credit each year
Prerequisite: Integrated Mathematics 2B or Integrated Mathematics 2A

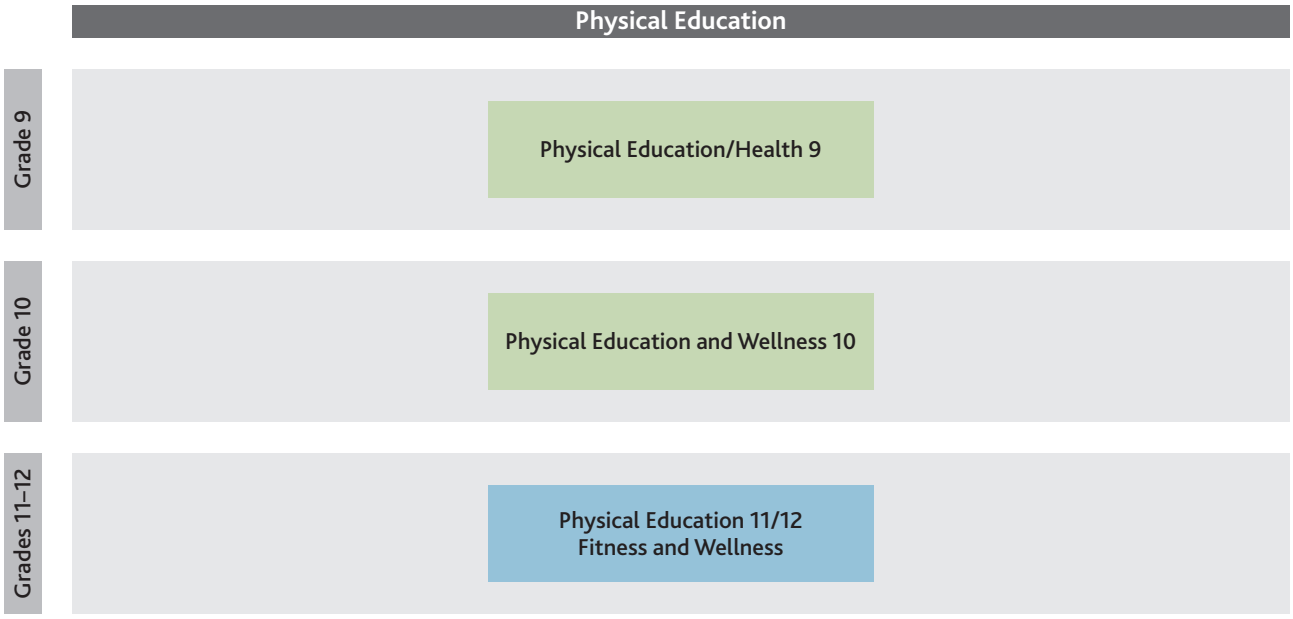
IB Mathematics SL, Analysis and Approaches, is a two-year course designed to prepare students for the IB exam at the end of the second year. During the two years, students will cover a variety of topics including a review and extension of different functions and their graphs, exponents and logarithms, binomial expansion, trigonometry, statistics and probability, and calculus. Students will also complete an independent exploration of their choosing using topics learned in the course.

IB Mathematics HL, Analysis and Approaches

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Mathematics, 1 credit each year
Prerequisite: Integrated Mathematics 2A

IB Mathematics HL, Analysis and Approaches is a very rigorous two-year course designed to prepare students for the IB exam at the end of the second year. Topics include algebra, complex numbers, functions and equations, circular functions and trigonometry, vectors, statistics, probability and calculus. Students must also study one of these four optional topics: statistics and probability; sets, relations and groups; series and differential equations; or discrete mathematics. Students are required to complete an Internal Assessment based on mathematical investigation or mathematical modeling.

Physical Education Curriculum Area



Grades 9 and/or 10 Courses | ZIS and/or AP Courses | IB Courses | Electives

Physical Education Curriculum Area

Philosophy

The goal of the Physical Education Curriculum Area is to encourage all students to develop their own physical, intellectual, emotional, social maturity, and moral well-being through a broad and balanced activities program. Students will learn how to demonstrate basic physical skills and concepts, and then successfully apply them in more complex and realistic contexts. Each student will be given challenges in a variety of traditional and alternative activities, with experience to achieve success and reach their potential within a safe environment, where managed risk-taking is encouraged. We encourage our students to care about their physical fitness and to develop an understanding and appreciation of the importance of an active, healthy, and safety-conscious lifestyle. We engage our students to relate to others in a positive manner and experience opportunities to take on the responsibility of leadership roles, while performing as individuals, in groups and in teams.

Physical Education/Health 9

Grade: 9
Subject Area/Course Credit: Physical Education, 1 credit
Prerequisite: None

Physical Education / Health 9 enables students to learn how to maintain, promote, and control their physical and mental well-being. The Physical Education component of this course expects students to develop the skills and knowledge needed to participate successfully in the following sports: orienteering, basketball, dance, floorball, ice skating, volleyball, badminton, softball and ultimate frisbee. During these activity units, students will also work on their general physical preparedness and fitness through a variety of related activities. The Health component of this course emphasizes the critical thinking and decision-making skills necessary for a healthy lifestyle, including investigating the consequences of their actions. Topics studied include nutrition, illegal drug use, alcohol abuse, tobacco and sexual relationships.

Physical Education and Wellness 10

Grade: 10
Subject Area/Course Credit: Physical Education, 1 credit
Prerequisite: None

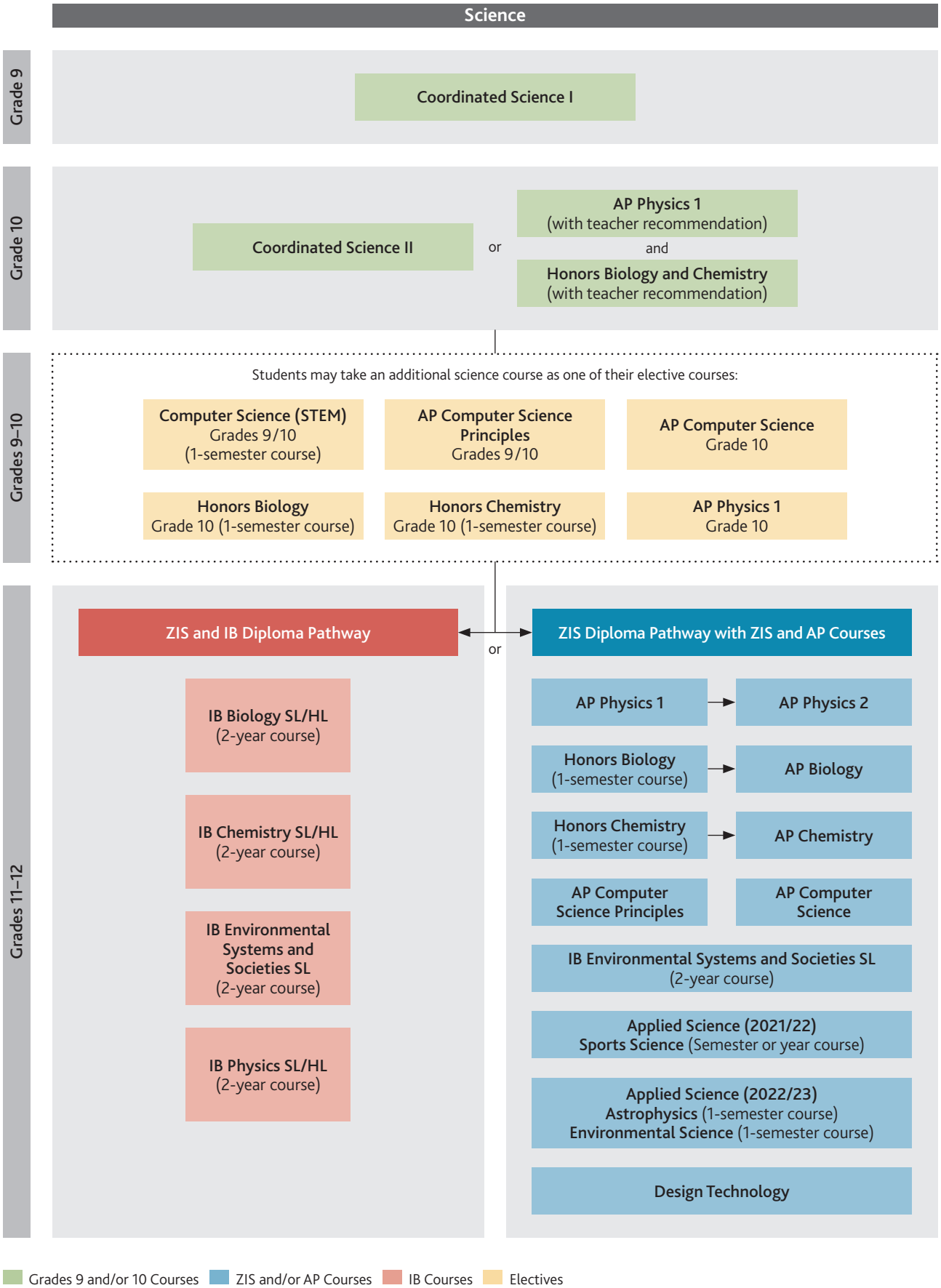
Students involved in this course will be expected to participate in sports unique to the Grade 10 curriculum; touch-rugby, lacrosse, floorball, ice skating, climbing, badminton doubles, golf and tennis. A parallel focus will include muscle anatomy, general nutrition, and focused fitness training methods. Another component to this course is the Sports Leader Award, an internally-monitored program which requires students to plan, lead and reflect on three separate teaching episodes. In addition, students must complete coursework about leading a fitness or activity lesson, fair play, refereeing, unit quizzes and nutrition projects. The goal of this program is to build a greater appreciation and motivation in one's' own personal initiative in leading a healthy lifestyle.

Physical Education 11/12 – Fitness and Wellness

Grades: 11–12
Subject Area/Course Credit: Physical Education, 1 credit
Prerequisite: None

Fitness and Wellness offers students a wide range of physical activity and fitness experiences, that aim to enhance overall acquisition of skills, understanding of anatomy, mindfulness, and personal health. The course will cater to various degrees of personal fitness levels and lifestyle needs. Students will work on personal programs and group experiences in the pursuit of developing a lifelong appreciation for exercise and health. This course is based on personal and social engagement, fitness programming, and other wellness topics. Students will have regular written quizzes.

Science Curriculum Area



Science Curriculum Area

Philosophy

The goal of the Science Curriculum Area is to provide stimulating instruction and quality resources that will guide our students towards becoming scientifically literate citizens. We believe that in order to function effectively in and contribute positively to society, young people need to have a strong basic knowledge of natural phenomena and the underlying scientific processes. Through our curriculum, our students will learn to use their knowledge to evaluate the quality of scientific information on the basis of its source and the methods used for its generation. Our selection of course offerings allows students to follow their own interests as they develop their skills in research, observation and experimentation. Our Science curriculum fosters inquiry into how science influences the world around us and promotes a view of science as a global pursuit.

Coordinated Science I

Grade: 9
Subject Area/Course Credit: Science, 1 credit
Prerequisite: None

CSI follows the Next Generation Science Standards (NGSS) Curriculum. Within the NGSS, there are three distinct and equally important dimensions to learning science. These dimensions are combined to form each standard – or performance expectation – and each dimension works with the other two to help students build a cohesive understanding of science over time. These dimensions are science and engineering practices, disciplinary core ideas and crosscutting concepts across the four domains of science, including Physical Science, Life Science, Earth Science, and Engineering Design. Topics explored in Grade 9 include matter and its interactions, maintaining a stable existence, energy, protecting ourselves from collisions, why don't we fall through the floor, and understanding how biodiversity affects us.

Coordinated Science II

Grades: 10 or 11
Subject Area/Course Credit: Science, 1 credit
Prerequisite: Coordinated Science I

Coordinated Science II follows the Next Generation Science Standards (NGSS) Curriculum. Within the NGSS, there are three distinct and equally important dimensions to learning science. These dimensions are combined to form each standard – or performance expectation – and each dimension works with the other two to help students build a cohesive understanding of science over time. These dimensions are science and engineering practices, disciplinary core ideas and crosscutting concepts across the four domains of science, including Physical Science, Life Science, Earth Science, and Engineering Design. This will continue the approach adopted in Coordinated Science I.

Computer Science (STEM)

Grades: 9 or 10
Subject Area/Course Credit: 0.5 elective credit, 1 semester course

This course engages students in project based learning, which promotes active self-learning by utilizing critical and proactive thinking, and which facilitates the development of many of the "soft skills" such as effective team skills, project management, communications, ethics, engineering economics etc. This year long course will expose students to technology and engineering practices and processes, provide them opportunity to improve their underlying computing and technical skills and to put into practice learning from other subject areas such as Math and Science. The course will encourage students to identify and subsequently analyze a selected real-life problem, then propose, design and evaluate solution(s). During this process they will need to assess relevant criteria, constraints and the impact of their proposed solution on underlying systems. Students will then design, prototype and test model solutions using approved software and/or hardware etc. After analysis and reflection of their project output against project goals they will then refine, rework and enhance their solutions as required.

New! AP Computer Science Principles

Grade: Grade 9 with recommendation, Grades 10–12
Subject Area/Course Credit: Grade 9/10 Science elective, Grade 11/12 Science credit
Prerequisite: Math 1B, or teacher recommendation

Computer science involves problem-solving, hardware, and algorithms that help people utilize computers and incorporate multiple perspectives to address real-world problems in contemporary life. As the application of computer science is integrated into more aspects of our lives, it is important to understand the impact of computer science and how to maintain privacy, safety, and security not only when using computers but also while being the innovators of new computing applications. Prior computer science knowledge and experience is not required though students should understand that any significant computer science course builds upon a foundation of mathematical reasoning. Successful completion of Math 1B is a pre-requisite.

AP Computer Science A

Grades: 11 or 12
Subject Area/Course Credit: Elective, 1 credit
Prerequisite: Math 2B

In AP Computer Science A, students will learn to design and implement computer programs that solve problems relevant to today's society, including art, media, and engineering. AP Computer Science A teaches object-oriented programming using the Java language and is meant to be the equivalent

of a first semester, college-level course in computer science. The course emphasizes problem-solving and algorithm development, as well as the use of hands-on experiences and examples so that students can apply programming tools and solve complex problems.

Honors Biology

Grade: 10, 11 or 12
Subject Area/Course Credit: Science 1 semester, 0.5 credit
Prerequisite: Coordinated Science II or Coordinated Science I with teacher recommendation

Honors Biology is taken as single semester course. Honors Biology is a rigorous course designed for strong science students to provide them with a comprehensive understanding of the Biological Sciences that can be applied to present day scenarios. This course serves as a prerequisite for the majority of students who plan to subsequently enroll in AP Biology. The course uses laboratory experience and case studies to introduce and reinforce classroom learning experiences. Topics of study include molecules and cells, molecular and theoretical genetics, ecology and evolution.

Honors Chemistry

Grades: 10, 11 or 12
Subject Area/Course Credit: Science 1 semester, 0.5 credit
Prerequisite: Coordinated Science II or Coordinated Science I with teacher recommendation

Honors Chemistry is taken as single semester course. Honors Chemistry is a rigorous course designed for strong science students to provide them with a comprehensive understanding of the Chemical Sciences that can be applied to present day scenarios. This course serves as a prerequisite for the majority of students who plan to subsequently enroll in AP Chemistry. The course uses laboratory experience and case studies to introduce and reinforce classroom learning experiences. Topics of study include Electrochemistry, Bonding, Chemical Geometry and Chemical Kinetics.

AP Physics 1: Algebra-Based

Grades: 10, 11 or 12
Subject Area/Course Credit: Science, 1 credit
Prerequisite: Coordinated Science II, Math 2B and teacher recommendation

AP Physics 1: Algebra-Based is equivalent to a first-semester university course in algebra-based physics in the United States and prepares students to take the AP exam in May. The course is designed to be taught over a full academic year to enable AP students to develop an understanding of the content and to focus on applying their knowledge through inquiry labs. The course covers Newtonian mechanics (including Rotational dynamics and Angular momentum); Kinematics (or equations of motion), Dynamics (or Newton's Laws), Circular motion, Linear Momentum and Impulse, Work, Energy, and Power; and Mechanical waves and sound. It will also introduce electric circuits (DC only) and introduce Kirchhoff's rules in analysing DC circuits with multiple loops.

AP Physics 2: Algebra-Based

Grades: 11 or 12
Subject Area/Course Credit: Science, 1 credit
Prerequisite: Successful completion of AP Physics 1: Algebra-Based and concurrent enrollment in PreCalculus or an equivalent course

AP Physics 2: Algebra-Based is equivalent to a second-semester university course in algebra-based physics in the United States and prepares students to take the AP exam in May. AP Physics 2: Algebra-Based is designed to be taught over a full academic year to enable AP students to develop an understanding of the content and to focus on applying their knowledge through inquiry labs. The course covers Fluid Statics and Fluid Dynamics; Thermodynamics (with kinetic theory); PV diagrams and probability; Electrostatics; Electric potential; DC Electrical circuits with Resistors and Capacitors; Magnetic fields; Electromagnetism; Physical and Geometric Optics; and Quantum, Atomic, and Nuclear physics.

AP Biology

Grades: 11 or 12
Subject Area/Course Credit: Science, 1 credit
Prerequisite: Honors Biology is a recommended prerequi site for most students, however with teacher recommendation students who have excelled in CSII may enroll in AP Biology directly

AP Biology is designed to be the equivalent of a general Biology course taken during the first year of university in the United States and prepares students to take the AP exam in May. It aims to provide students with the conceptual framework, factual knowledge and analytical skills necessary to deal critically with the rapidly changing science of Biology. In this course, students will learn about the core scientific principles, theories and processes governing living organisms, biological systems and natural phenomena. Students will be asked to develop advanced reasoning and inquiry skills as they design experiments, collect and analyse data using mathematics and other methods, and interpret that data to draw conclusions.

AP Chemistry

Grades: 11 or 12
Subject Area/Course Credit: Science, 1 credit
Prerequisite: Honors Chemistry is a recommended prerequisite for most students, however with teacher recommendation students who have excelled in CSII may enroll in AP Chemistry directly

AP Chemistry is designed to be the equivalent of a general chemistry course taken during the first year of university in

the United States and prepares students to take the AP exam in May. In this course, students build on the fundamentals of Chemistry learned in a first year course. Students entering AP should have a firm grasp of atomic structure, periodicity, stoichiometry, bonding, energetics, and kinetics. In this course, students will expand on this previous knowledge with meaningful laboratory investigations, presentation of findings, and the remainder of the AP Chemistry content. Further, they will develop their ability to think clearly and express ideas with clarity and logic, both orally and in writing.

Design Technology

Grades: 9/10
Subject Area/Course Credit: Arts, 1 credit
Grades: 11/12
Subject Area/Course Credit: Science, 1 credit
Prerequisite: None

Design Technology (STEM) is a project-based learning (PBL) course where students will design, engineer and manufacture personal projects using a broad spectrum of materials and hands-on techniques utilizing the Makerspace. Throughout this course students will enrich their "Maker Mentality" – a do-it-yourself, process-oriented ability to actively learn and problem solve. With this unique skill they will create a Technical/Investigation Notebook, in which they will brainstorm, sketch, research, plan, modify and solidify a personal idea/concept they are developing. Students will investigate and fabricate their ideas to fruition, with the inherent imperfections and failures encountered along this process welcomed and embraced as valuable learning tools. After studying and applying the basics of a variety of outputs/crafts – for example, woodworking, electronics/programming, sewing, metalworking, digital manufacturing, computer-aided design (CAD) 3D printing to name a few – the final project calls for the student to develop and exhibit a personal creation focusing on one of these outputs.

New! Sports Science

Grade: 11–12 (semester or year course)
Subject Area/Course Credit: Science Credit, Semester 0.5 credit, Year long 1.0 credit
Prerequisite: Coordinated Science II

Sports Science consists of two semester courses incorporating the traditional disciplines of anatomy and physiology, biomechanics, and psychology in the context of sports, exercise and health. Students will also carry out practical (experimental) investigations in both laboratory and field settings. Students are able to take the course for one semester or for the whole year.

New! Astrophysics (offered in 2022/2023)

Grade: 11–12 (semester course)
Subject Area/Course Credit: Science, 0.5 credit
Prerequisite: Coordinated Science II

Astrophysics will include a study of the nature and origins of the Solar System, and the visible night sky. We will discuss, among other things, what separates a Stellar cluster from a Constellation and a Neutron Star from a White dwarf? Stellar characteristics and stellar evolution will also form part of our studies – why is the sun yellow and what is its future? We will also discuss Cosmology and why we now come to view the "Big Bang" as the best model for origins of the Universe. The course will be assessed with a combination of written and online tests and practical assignments.

New! Environmental Science (offered in 2022/2023)

Grade: 11–12 (semester course)
Subject Area/Course Credit: Science, 0.5 credit
Prerequisite: Coordinated Science II

Environmental science, a semester-long course, is a scientific study of the natural world and how it is influenced by people. Topics studied will include ecology, food, energy, biodiversity, pollution, and climate change. We will learn about physical, biological and chemical processes of natural systems as well as the ways in which human activity interrupts or alters these processes. In this way, we will investigate the environmental issues the world is facing today. The ultimate goal of the course is to think critically about the sustainability of human activities on the planet.

IB Environmental Systems and Societies SL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Science, 1 credit each year
Prerequisite: Coordinated Science II and teacher recommendation

IB Environmental Systems and Societies (ESS) SL is a two-year interdisciplinary Group 3 (Individuals and Societies) and Group 4 course (Sciences). It is designed to prepare students for the IB exam at the end of the second year. Students will learn to articulate and justify a personal viewpoint on environmental issues with reasoned argument while appreciating alternative viewpoints, including the perceptions of different cultures. Core topics include foundations of environmental systems and societies, ecosystems and ecology, biodiversity and conservation, water and aquatic food production systems and society, soil systems and terrestrial food production systems and society, atmospheric systems and society, climate change and energy production, human systems and resource use. **Note:** There will be a required three-day field trip during this

course during which to develop practical ecological research techniques and complete an internal investigation.

IB Biology SL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Science, 1 credit each year
Prerequisite: Coordinated Science II and teacher recommendation

IB Biology SL is a two-year course designed to prepare students for the IB exam at the end of the second year. This is a survey course aimed at students who are not likely to pursue further study in the Biological Sciences. The core topics include cells, molecular biology, genetics, ecology, evolution and biodiversity, and human physiology. In addition to the core topics, teachers select one additional topic of study. All students must complete an independent practical investigation.

IB Biology HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Science, 1 credit each year
Prerequisite: Coordinated Science II and teacher recommendation

IB Biology HL is a two-year course designed to prepare students for the IB exam at the end of the second year. This is a rigorous course aimed at serious students who are interested in developing a more comprehensive understanding of the Biological Sciences. The core topics include: cells, molecular biology, genetics, ecology, evolution and biodiversity, and human physiology. In addition to the core topics, teachers select one additional topic of study. All students must complete an independent practical investigation of the topic of their choice. HL students must also study additional topics in nucleic acids, metabolism, cell respiration and photosynthesis, plant biology, genetics and evolution, and animal physiology.

IB Chemistry SL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Science, 1 credit each year
Prerequisite: Coordinated Science II and teacher recommendation

IB Chemistry SL is a two-year course designed to prepare students for the IB exam at the end of the second year. This is a survey course aimed at students who are not likely to pursue further study in Chemistry. Core topics include quantitative chemistry, atomic structure, periodicity, bonding, energetics, kinetics, equilibrium, acids and bases, oxidation and reduction, organic chemistry, measurement and data processing. One additional topic is chosen by teachers and students must complete an independent practical investigation assessed using criteria set by the IB.

IB Chemistry HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Science, 1 credit each year
Prerequisite: Coordinated Science II and teacher recommendation

IB Chemistry HL is a two-year course designed to prepare students for the IB exam at the end of the second year. Similar to the SL course, but studied in more depth are the core topics: quantitative chemistry, atomic structure, periodicity, bonding, energetics, kinetics, equilibrium, acids and bases, oxidation and reduction, organic chemistry, measurement and data processing. One additional topic is chosen by the teacher and students must complete an independent practical investigation assessed using criteria set by the IB.

IB Physics SL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Science, 1 credit each year
Prerequisite: Coordinated Science II, Math 2B, and teacher recommendation

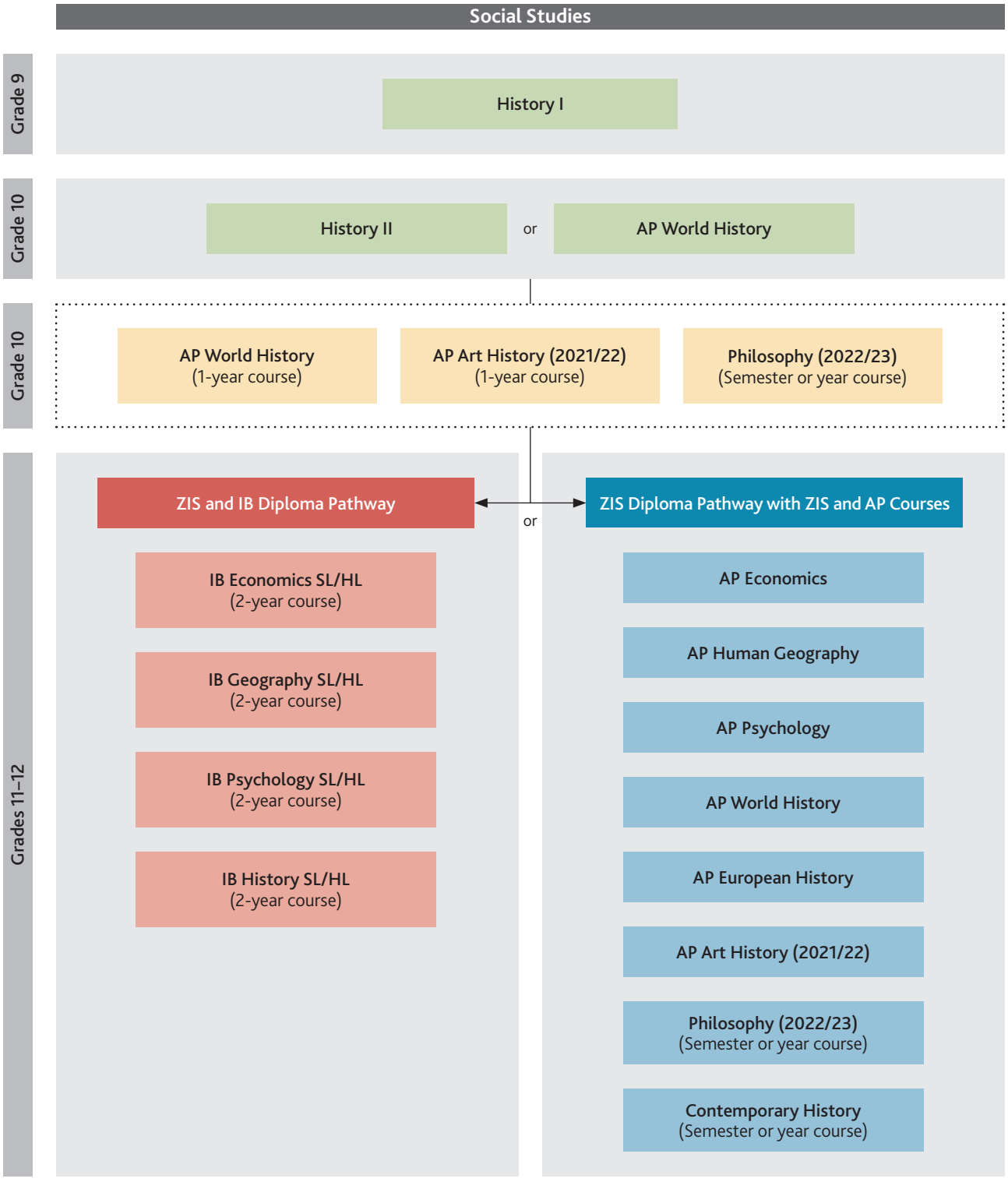
IB Physics SL is a two-year course designed to prepare students for the IB SL Physics exam at the end of the second year. This is a survey course aimed at students who are not likely to pursue further study in Physics. Core topics include physics and physical measurements, mechanics, thermal physics, oscillations and waves, electric currents, fields and forces, atomic and nuclear physics, energy, power and climate change. One additional topic is chosen by the teacher and students must complete an independent practical investigation assessed using criteria set by the IB.

IB Physics HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Science, 1 credit each year
Prerequisite: Coordinated Science II, strong performance in Math 2B or completion of Math 2A. Concurrent enrollment in IB HL or SL Mathematics or an equivalent course is strongly recommended and a teacher recommendation

IB Physics HL is a two-year course designed to prepare students for the IB exam at the end of the second year. Core topics include: physics and physical measurements, mechanics, thermal physics, waves, electricity and magnetism, circular motion and gravitation, atomic, nuclear and particle physics, and energy production. In addition to the core topics, teachers select one additional topic and students must complete an independent practical investigation assessed using criteria from the IB. HL students must also study: fields, wave phenomena, electromagnetic induction, and quantum and nuclear physics.

Social Studies Curriculum Area



Grades 9 and/or 10 Courses | ZIS and/or AP Courses | IB Courses | Electives

Social Studies Curriculum Area

Philosophy

The Social Studies department will foster critical, caring, creative, and well-informed students who understand the past and how it shapes the present; how humans interact with the earth; how scarce resources are utilized; and how to appreciate wisdom. The Social Studies department thus offers a wide variety of Social Studies subjects that teach core competencies and concepts. These courses reflect the talents and passions of the current staff to ensure the highest quality of instruction and learning experience.

History I

Grade: 9
Subject Area/Course Credit: Social Studies, 1 credit
Prerequisite: None

History I explores multiple regions of the world through time. Course units are organized thematically with each unit emphasizing historical concepts such as causation, continuity and change, comparison, chronology, significance, and perspective. A variety of topics are examined, such as medicine and public health, belief systems, the impact of ideas, empire-building and leadership, exploitation, and conflict. Transferable skill development includes research, essay writing, source analysis, presentations, discussion, and analytical thinking.

History II

Grade: 10
Subject Area/Course Credit: Social Studies, 1 credit
Prerequisite: None

History II 1800-2000 follows the global impact of Western industrialization from 1800 through the twenty-first century. A perspective on non-Western development, as well as imperialism, during this period is provided by case studies in Asia, Latin America and Africa. Some of the major themes include ideologies, modernism, gender, revolution and environmental issues. Human and physical geography are also used to bring other insights into the history of the times. Emphasis is placed on historiography, source analysis and essay writing.

AP World History

Grades: 10, 11 or 12
Subject Area/Course Credit: Social Studies, 1 credit
Prerequisite: Teacher recommendation

AP World History is designed to be the equivalent of a general World History course taken during the first year of university in the United States and prepares students to take the AP exam in May. This is a survey course from about 1200 C.E. The course specifically examines the global interactions between humans and their environment, the development of cultures, the building of states, the expansion of economic systems and the development of social structures. Students will learn chronological reasoning, placing events within historical contexts, crafting historical interpretations based on evidence and providing historical synthesis.
Note: The course is recommended as an alternative to the History II 1800–2000 course for Grade 10 students who wish to take an accelerated Social Studies course.

AP Art History

Grades: 10, 11 or 12
Subject Area/Course Credit: Social Studies, 1 credit
Prerequisite: None

AP Art History is designed to be the equivalent of a general Art History course taken during the first year of university in the United States and prepares students to take the AP exam in May. Students study the development of human history by means of examining 250 objects, rather than written documents, from world history. By means of studying art within its historic and cultural contexts students will learn how cultures have responded to various experiences. Students will enter the global art world as active participants as they research, read and write about art, artists, art making and responses to art. Museum visits are an integral part of this course. Students have the opportunity to join a three-day museum trip to Paris.

New! Philosophy

Grade: 10, 11 or 12
Subject Area/Course Credit: Grade 10 elective, Grade 11/12 Social Studies Credit. Semester 0.5, Year 1.0
Prerequisite: History II or AP World History

The course is open to all Grade 11 and 12 students who are tempted to consider some of the big, or even trivial, questions in life, and who also desire to become familiar with the ideas and thoughts, which continue to shape our civilization. The emphasis is on the students "doing Philosophy" rather than memorizing names and ideas. Students are expected to gain familiarity with the issues and problems in Philosophy, to think hard and genuinely, to develop the ability to express ideas cogently and clearly and, perhaps, to develop an open and informed attitude of discourse. Students are able to take the course for one semester, or for the whole year.

Contemporary History

Grades: 11, 12
Subject Area/Course Credit: Social Studies, 1 credit
Prerequisite: None

This is not simply a course in current affairs. It is an interdisciplinary introduction to some of the world's most pressing issues, an examination of how they developed and

an exploration of how they might be resolved. Issues will be looked at using approaches from geography, history, economics, law, politics, ecology and development studies. Topics may include global climate change; global species extinction; global poverty; resource depletion; the impact of technologies; geopolitics; human rights; refugees and immigration. Students will research topics using a variety of resources, write reports, give presentations and engage in project-based learning.

AP European History

Grades: 11 or 12
Subject Area/Course Credit: Social Studies, 1 credit
Prerequisite: Teacher recommendation

AP European History is designed to be the equivalent of a general European History course taken during the first year of university in the United States and prepares students to take the AP exam in May. The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which Europeans, and increasingly in more recent times the world, live. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop an understanding of some of the principal themes in modern European History, analyze historical evidence and historical interpretation, and express historical understanding in writing.

AP Psychology

Grades: 11 or 12
Subject Area/Course Credit: Social Studies, 1 credit
Prerequisite: Teacher recommendation

AP Psychology is designed to be the equivalent of the general Psychology course taken during the first year of university in the United States and prepares students to take the AP exam in May. The course introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other non-human animals. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in conducting research.

AP Economics

Grades: 11 or 12
Curriculum Area / Course credit: Social Studies, 1 credit
Prerequisite: Teacher recommendation

AP Economics is designed to be the equivalent of the general Macroeconomic and Microeconomic course usually taken during the first year of university in the United States and prepares students to take two AP exams in May. This course will combine both Advanced Placement Economic courses and as a result, students are expected to have strong study skills, be self-motivated and keep up with the pace of the class. In Microeconomics, students learn about how individual markets work, market failure, and different types of firms. In Macroeconomics, students learn about topics such as national economies and the interaction of inflation, unemployment, and economic growth.

New! AP Human Geography

Grade: 11 or 12
Subject Area/Course Credit: Social Studies, 1 credit
Prerequisite: History II or AP World History

AP Human Geography is a college-level introduction to human geography connecting geographic concepts and processes to real-life scenarios to understand the world we live in today. Using the tools and thinking processes of geographers to understand human population, migration and land use, and how these have impacted the surface of Earth. The content is presented thematically around the discipline's main subfields: economic geography, cultural geography, political geography, and urban geography. In case studies drawn from all world regions, students explore patterns and trends in data such as maps, tables, charts, graphs, infographics, images, and landscapes and spatial relationships using geographic scales. Students are able to choose to take the AP exam upon completion of the course.

IB Environmental Systems and Societies SL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Social Studies, 1 credit each year
Prerequisite: Coordinated Science II and teacher recommendation

IB Environmental Systems and Societies (ESS) SL is a two-year interdisciplinary Group 3 (Individuals and Societies) and Group 4 course (Sciences). It is designed to prepare students for the IB exam at the end of the second year. Students will learn to articulate and justify a personal viewpoint on environmental issues with reasoned argument while appreciating alternative viewpoints, including the perceptions of different cultures. Core topics include: foundations of environmental systems and societies, ecosystems and ecology, biodiversity and conservation, water and aquatic food production systems and society, soil systems and terrestrial food production systems and society, atmospheric systems and society, climate change and energy production, human systems and resource use. **Note:** There will be a required three day field trip during this course during which to develop practical ecological research techniques and complete an internal investigation.

IB History SL and HL

Grades: 11–12 (two-year course)
Curriculum Area/Course credit: Social Studies, 1 credit each year
Prerequisite: Teacher recommendation

IB History is a two-year course devoted to the study of world history in the 20th century, with particular attention given to the study of authoritarian regimes and global conflicts through the concepts of change, continuity, causation, consequence, significance and perspective. The HL course also includes a regional option with three units from European History being studied; these may include European states in the inter-war period, International Relations and the USSR 1924–2000. A key skill component of the course is the critical analysis of documents and sources as well as the writing of a 2,200 word Historical Report.

IB Psychology SL and HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Social Studies, 1 credit each year
Prerequisite: Teacher recommendation

IB Psychology examines the interaction of biological, cognitive and sociocultural influences on human behavior, thereby adopting an integrative approach. Understanding how psychological knowledge is generated, developed and applied enables students to achieve a greater understanding of themselves and appreciate the diversity of human behavior and culture. The ethical concerns raised by the methodology and application of psychological research are key considerations in IB Psychology. Students are expected to gain mastery of the issues and problems in Psychology, to explore various interpretations, to carefully examine how knowledge in Psychology is generated and to be able to articulate their knowledge and critical thinking. The two optional themes are Abnormal Psychology and Developmental Psychology. HL students will study both options; SL students will choose one.

IB Economics SL and HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Social Studies, 1 credit each year
Prerequisite: Teacher recommendation

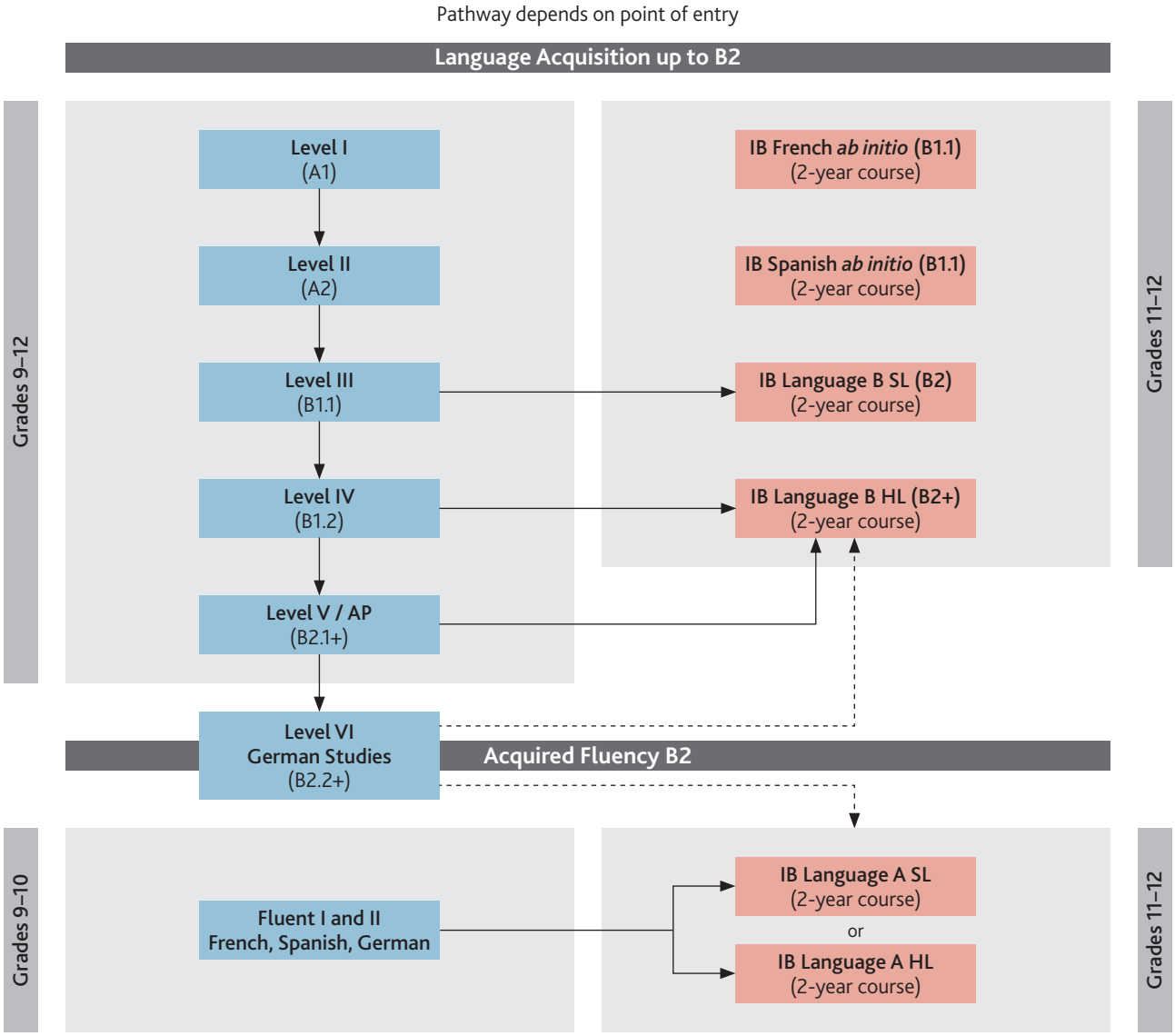
IB Economics SL is a dynamic two-year course that addresses one of society's most pressing problems: scarcity. The world's resources are finite, but the wants and needs of mankind are seemingly infinite. Economics seeks to understand the function of markets, their successes and failures in the allocation of scarce resources across society, and the interaction of individuals, firms, and nations as they engage in voluntary exchange with one another in the economic sphere. HL content is comprised of topics that are extended from the core syllabus, including areas such as Economics of the Environment, Asymmetric Information, and Market Power.

IB Geography SL and HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: Social Studies, 1 credit each year
Prerequisite: Teacher recommendation

IB Geography is a two-year course focusing on the interactions between individuals, societies and the physical environment, both in time and in space. It investigates the ways that people adapt and respond to change and evaluates management strategies that are related to change. The course examines key global issues such as poverty, population, sustainability and global climate change, and seeks to identify and understand the processes that lie behind various global patterns and trends. HL includes additional unit choices such as Global Risks and Resilience, Power, Place and Networks, Human Development and Diversity.

World Language Curriculum Area



Grades 9 and/or 10 Courses | ZIS and/or AP Courses | IB Courses | Electives

World Language Curriculum Area

Philosophy

The goal of the World Language Curriculum is to promote global citizenship. Since globalization, mobility and communication bring the world ever closer together, individuals who have language abilities can thereby provide their own nation or community with an insider's view into foreign cultures and give insights into other perspectives on international situations and current events. A person competent in other languages can bridge the gap between cultures, contribute to international diplomacy, promote national security and world peace, and successfully engage in international business.

ZIS Language Policy

ZIS encourages multilingualism as a tremendous asset for life in a globalised world. To this end, ZIS requires that all students study a language other than English for at least two years. Though ZIS is not a bilingual school, we strongly encourage, and support students in developing language skills and conceptual understanding in their mother tongue.

Swiss law requires that all students study German until the end of Grade 9.

ZIS recognises that language develops along a continuum and organises the progression of language courses accordingly. The language acquisition track develops foreign language acquisition abilities up to the B2 level of the Common European Framework of Reference where language learners transition to the fluent speaker track.

In accordance with these principles and with IB guidelines for language placement:
Language B courses are intended for:

— Foreign language learners up to the B2 level

Language A courses are intended for the following students:

— Fluent speakers
— Non mother tongue speakers who have reached near native fluency (B2 level).

French I (Common European Framework of Reference Equivalent A1)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: None

French I is designed for students with no knowledge of the French language. Students familiarize themselves with the basics of French grammar and spelling and acquire a vocabulary of roughly 700 words. Upon successful completion of this course, students will be able to confidently approach a number of everyday situations in French and write short, creative essays. The grammar taught in this course includes pronouns, adjectives, the present tense, the imperative form, the near future and past tenses (recent past and perfect). At the end of the course students are prepared to sit an external examination to receive the European Language Certificate, the TELC (The European Language Certificates), corresponding to their current level, if they so choose.

French II (Common European Framework of Reference Equivalent A2)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: French I

French II is a continuation of introductory French in which language skills are brought to a level enabling students to participate more fully in general conversation, to read more sophisticated passages, and to write with a firmer command of syntactic structures. Upon completion of this course, students will have expanded their vocabulary and be familiar with the following grammar principles: present tense, past tenses (imparfait and passé composé), imperative, future tense, reflexive verbs, pronouns (subject and object), prepositions and conjunctions. Students are expected to use French as the language of communication in the classroom. At the end of the course students are prepared to sit an external examination to receive the European Language certificate, the TELC (The European Language Certificates), corresponding to their current level, if they so choose.

French III (Common European Framework of Reference Equivalent B1.1)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: French II

French III strives to bridge the gap between intermediate and advanced competence in French. This class is taught almost exclusively in French and students are expected to use French as the language of communication in the classroom. In this course, students engage in discussion topics that include abstract themes, review and expand their use of syntactic structures, read more sophisticated material, and view selected French films and documentary materials. Upon completion, students are expected to know most of the tenses and pronouns and be able to use a wide range of vocabulary and grammar structures in spoken and written form. At the end of the course students are prepared to sit an external examination to receive the European Language certificate, the TELC (The European Language Certificates), corresponding to their current level, if they so choose.

French IV (Common European Framework of Reference Equivalent B1.2)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: French III

French IV is a theme-based course that is designed to build fluency and accuracy in communication. It provides a continuation of grammar review at the advanced level, further development of oral expression through discussion and formal presentations, an introduction to the analysis of Francophone literature and film, and an overview of major events, including cultural developments affecting French thought. Students prepare written work in a workshop atmosphere in which rewriting and collaboration are encouraged in order to teach self-correction. At the end of the course students are prepared to sit an external examination to receive the European Language certificate, the TELC (The European Language Certificates), corresponding to their current level, if they so choose. Students have excelled in this course may be able to sit the AP French exam.

French V (Common European Framework of Reference Equivalent B2.1+)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: French IV

The course emphasizes the use of language for active communication and strives to develop a strong command of vocabulary and structure; an understanding of spoken French in various conversational situations; the ability to read newspaper and magazine articles, contemporary fiction, and non-technical writings without the use of a dictionary as well as fluency and accuracy in expressing ideas orally and in writing. Extensive practice in the organization and writing of compositions is also able. Upon completion of this course, students are well prepared to take the AP French exam or a TELC (The European Language Certificate) exam if they so choose. Upon reaching the B2 level are equipped to continue language studies in the fluent speaker track.

IB French ab initio SL (Common European Framework of Reference Equivalent A2/B1.1)

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: None

IB French ab initio SL is a two-year course designed for students who have no prior knowledge of the French language and plan to take the IB exam at the end of the second year. Using a communicative approach, students are introduced to the target language and its culture and learn to master a number of everyday situations in French. Reading, writing, speaking and listening are equally stressed. Upon completion of this course, students should be confident with the following grammar principles: present tense, past tenses, imperative, future tense, reflexive verbs, pronouns, prepositions and conjunctions. At the end of this course students are prepared to sit an external examination to receive the European Language certificate, the TELC (The European Language Certificates), corresponding to their current level, if they so choose.

IB French B SL (Common European Framework of Reference Equivalent B2.)

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: French III or French IV

IB French B SL is a two-year course designed to prepare students to take the IB exam at the end of the second year. This course helps students develop their abilities in the four skill areas of listening, speaking, reading and writing in a wide variety of contexts. Emphasis is placed upon the correct use of grammar and syntax in speaking and writing French. Students are challenged to express their opinions through debates and discussions. Investigations are based on a variety of authentic publications such as newspaper articles, official documents and documentaries. Particular emphasis is placed on the development of oral skills.

IB French B HL (Common European Framework of Reference Equivalent B2+)

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: French III or French IV

IB French B HL is a two-year course designed to prepare students to take the IB exam at the end of the second year. This course helps students develop their abilities in the four skill areas of listening, speaking, reading and writing in a wide variety of contexts. Emphasis is placed upon the correct use of grammar and syntax in speaking and writing French. Students are challenged to express their opinions through debates and discussions. Investigations are based on a variety of authentic publications such as newspaper articles, official documents and documentaries. Particular emphasis is placed on the development of oral skills. HL students are required to use more sophisticated language and read additional literary works.

German I (Common European Framework of Reference Equivalent A1)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: None

German I is designed for students with little to no knowledge of the German language. The course develops proficiency in the four basic skills of language - listening, speaking, reading and writing. The theme-based units cover such topics as introductions, school and family life, travel, shopping, hobbies, geography, culture and holidays. The grammar objectives include: the present tense, articles and pronouns in nominative, accusative and dative, imperative, and the present perfect. At the end of the course students will be given the opportunity to sit an external examination to receive the European Language certificate corresponding to their current level.

German II (Common European Framework of Reference Equivalent A2)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: German I or CEFR A1 certificate or equivalent

In German II students continue to develop proficiency in listening, speaking, reading and writing, but they are also introduced to more complex reading and grammar. Grammar points studied include: the past and future tenses, coordinating and subordinating conjunctions, the dative case, the difference between direct and indirect objects, and adjective endings. Students are expected to use German as the language of communication in the classroom and at the end of the course are expected to write and converse with some spontaneity. At the end of the course students will be given the opportunity to sit an external examination to receive the European Language certificate corresponding to their current level.

German III (Common European Framework of Reference Equivalent B1.1)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: German II or CEFR A2 Certificate or equivalent

German III strives to bridge the gap between intermediate and advanced competence in German. This class is taught mostly in German and students are expected to use German as the language of communication in the classroom. Extensive time is dedicated to the study of advanced grammar (the passive voice, reflexive verbs, the genitive case, relative sentences, adjective endings, imperfect, and prepositional phrases) and emphasis is placed on the expansion and strengthening of students' reading, writing and speaking skills. At the end of the course, students will be given the opportunity to sit an external examination to receive the European language certificate corresponding to their current level.

German IV (Common European Framework of Reference Equivalent B1.2)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: German III, placement test or teacher recommendation

German IV is a theme-based course that is designed to build fluency and accuracy in both written and oral communication. Extensive practice in the organization and writing of a variety of text styles (compositions, essays, critiques, speeches, etc.) is emphasized. German IV grammar instruction builds on previously taught grammatical concepts, and covers topics such as the simple past, infinitive constructions, the subjunctive, the passive voice, subordinate clauses, adjective endings, idioms. At the end of the course students will be given the opportunity to sit an external examination to receive the European Language certificate corresponding to their current level. Students who excel in this course may be able to take the AP exam at the end of the year.

German V (Common European Framework of Reference Equivalent B2.1+)

Grades: 9, 10, 11, 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: German IV or CEFR B1 Certificate or equivalent

German V is a theme-based course that is designed to develop fluency and accuracy in both written and oral communication. Extensive practice in the organization and writing of a variety of text styles (compositions, essays, critiques, speeches, etc.) is emphasized. German V grammar instruction reinforces and consolidates previously taught grammatical concepts. Conversational topics include topics such as work/life balance, culture, art and literature, science as well as knowledge, expression and emotion in texts and future visions and perspectives. At the end of the course, students will be able to express their views and opinions effectively in writing and relate to those of others. They will also be able to read with a large degree of independence, adapting style and speed of reading to different texts and purposes, for example, specialized texts, articles and reports or literary texts. In addition, they will use spoken language with a large degree of fluency, accuracy and effectiveness on a wide range of general, academic, vocational or leisure topics, marking clearly the relationships between ideas. Upon completion of this course, students are able to take the AP German exam or a Goethe certificate exam, if they so

choose. Upon reaching the B2 level are equipped to continue language studies in the fluent speaker track.

IB German B SL (Common European Framework of Reference B2)

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: German III or German IV

IB German B SL is a two-year course that develops student abilities in the four skill areas of listening, speaking, reading and writing in a wide variety of contexts. Emphasis is placed on the correct use of grammar and syntax in speaking and writing. Lessons center around cultural, social and political themes of German-speaking countries. Students study a variety of authentic publications such as newspaper articles, reports, official documents, documentaries and literary works. Students will also read a selection of literary texts.

IB German B HL (Common European Framework of Reference Equivalent B2+)

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: German III or German IV

IB German B HL is a two-year course that develops student abilities in the four skill areas of listening, speaking, reading and writing in a wide variety of contexts. Emphasis is placed on the correct use of grammar and syntax in speaking and writing. Lessons center around cultural, social and political themes of German-speaking countries. Students study a variety of authentic publications such as newspaper articles, reports, official documents, documentaries and literary works. Students will also read a selection of literary texts.

Spanish I (European Framework Equivalent A1)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: None

Spanish I is designed for students with no knowledge of the Spanish language. Students familiarize themselves with the basics of Spanish grammar and spelling and acquire a vocabulary of roughly 700 words. Upon successful completion of this course, students will be able to confidently approach a number of everyday situations in Spanish and write short, creative essays. The grammar taught in this course includes: pronouns, adjectives, the present, the imperative and past tenses (present perfect, simple past and indefinite past) of the most common verbs. At the end of the course students are prepared to sit an external examination to receive the European Language certificate, the DELE, corresponding to their current level, if they so choose.

Spanish II (European Framework Equivalent A2)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: Spanish I

Spanish II is conducted almost entirely in Spanish, building on acquired competence to progress beyond the beginning stages of language acquisition. Presentation of new language structures is followed by question and answer drills, conversations, written exercises, reading, and composition. Conversational skills are emphasized. Upon completion of this course students will have considerably expanded their vocabulary and be familiar with the following grammar principles: present tense, past tenses, the future tense, reflexive verbs, pronouns (subject and object), prepositions and conjunctions. At the end of the course students are prepared to sit an external examination to receive the European Language certificate, the DELE, corresponding to their current level, if they so choose.

Spanish III (Common European Framework of Reference Equivalent B1.1)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: Spanish II

Spanish III strives to bridge the gap between intermediate and advanced competence in Spanish. This class is taught almost exclusively in Spanish as the language of communication in the classroom. In this course, students engage in discussion topics that include a variety of themes, review and expand their use of grammatical structures, read more sophisticated material, and view selected Spanish films and documentary materials. Students will also read a variety of novels from which they derive the concepts and themes we cover in the course. Upon completion, students are expected to know most of the tenses and pronouns and be able to use a wide range of vocabulary and grammar structures in spoken and written form. At the end of the course students are prepared to sit an external examination to receive the European Language certificate, the DELE, corresponding to their current level, if they so choose.

Spanish IV (Common European Framework of Reference Equivalent B1.2)

Grades: 9, 10, 11 or 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: Spanish III

Spanish IV helps students develop their speaking and writing abilities in a wide variety of contexts. Emphasis is placed upon the correct use of grammar and syntax in speaking and writing Spanish. Students are challenged to express their opinions through debates and discussions. Investigations are based on a variety of authentic publications such as

newspaper articles, official documents and documentaries. Particular emphasis is placed on the development of oral skills. At the end of the course students are prepared to sit an external examination to receive the European Language certificate, the DELE, corresponding to their current level, if they so choose.

Spanish V (Common European Framework of Reference Equivalent B2.1+)

Grades: 9, 10, 11, 12
Subject Area/Course Credit: World Language, 1 credit
Prerequisite: Spanish IV

Spanish V emphasizes the use of language for active communication and strives to develop a strong command of vocabulary and structure; an understanding of spoken Spanish in various conversational situations; the ability to read newspaper and magazine articles, contemporary fiction, and non-technical writings without the use of a dictionary as well as fluency and accuracy in expressing ideas orally and in writing. Extensive practice in the organization and writing of compositions is also able. Upon completion of this course, students are well prepared to take the AP Spanish exam or a DELE language certification exam, if they so choose. Upon reaching the B2 level are equipped to continue language studies in the fluent speaker track.

IB Spanish ab initio SL (Common European Framework of Reference Equivalent A2/B1.1)

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: None

IB Spanish ab initio SL is a two-year course designed for students who have no prior knowledge of the Spanish language and plan to take the IB exam at the end of the second year. Using a communicative approach, students are introduced to the target language and its culture and learn to master a number of everyday situations in Spanish. Reading, writing, speaking and listening are equally stressed. Upon completion of this course, students should be confident with the following grammar principles: present tense, past tenses, imperative, future tense, reflexive verbs, pronouns, verbal modes indicative and subjunctive, prepositions and conjunctions. At the end of this course students will also be given the opportunity to sit an external examination to receive the European Language certificate, the DELE (Diploma of Spanish as a Foreign Language), corresponding to their current level.

IB Spanish B SL (Common European Framework of Reference Equivalent B2)

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: Spanish III or Spanish IV

IB Spanish B SL is a two-year course designed to prepare students to take the IB Spanish B SL exam at the end of the second year. This course helps students develop their abilities in the four skill areas of listening, speaking, reading and writing in a wide variety of contexts. Emphasis is placed upon the correct use of grammar and syntax in speaking and writing Spanish. Students are challenged to express their opinions through debates and discussions. Investigations are based on a variety of authentic publications such as newspaper articles, official documents and documentaries. Particular emphasis is placed on the development of oral skills.

IB Spanish B HL (European Framework Equivalent B2+)

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: Spanish III or Spanish IV

IB Spanish B HL is a two-year course designed to prepare students to take the IB Spanish B HL exam at the end of the second year. This course helps students develop their abilities in the four skill areas of listening, speaking, reading and writing in a wide variety of contexts. Emphasis is placed upon the correct use of grammar and syntax in speaking and writing Spanish. Students are challenged to express their opinions through debates and discussions. Investigations are based on a variety of authentic publications such as newspaper articles, official documents and documentaries. Particular emphasis is placed on the development of oral skills. HL students are required to use more sophisticated language and read additional literary works.

Fluent Speakers

Fluent I and II French

Grades: 9, 10
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: Teacher recommendation

This course is designed for fluent speakers to develop skills in academic reading, writing and speaking. The focus of this course will be on language structure, grammar, spelling and vocabulary in order to enable students to write and communicate more effectively. Furthermore, they will

practice reading comprehension, using both literary and nonfiction texts from authentic French sources. The class will be conducted exclusively in French and students will have the opportunity to further develop their oral language skills in a higher-level environment. The course aims to prepare students to access the IB French A curriculum.

IB French A: Language and Literature SL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: French Fluent I or II or teacher recommendation

IB French A: Language and Literature is a two-year literature and language-based course for mother-tongue students designed to prepare them to take the IB exam at the end of the second year. Students will be engaged in literature and different topics in linguistics like language in a cultural context and the use of language in the media. Students are encouraged to write accurately in a variety of styles and in different voices, matching style to content. SL students have less class time than HL students.

IB French A: Language and Literature HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: French Fluent II or teacher recommendation

IB French A: Language and Literature HL is a two-year literature and language-based course for mother-tongue students designed to prepare them to take the IB exam at the end of the second year. Students will be engaged in literature and different topics in linguistics like language in a cultural context and the use of language in the media. Students are encouraged to write accurately in a variety of styles and in different voices, matching style to content. HL students have more class time and workload than SL students.

Level VI Fluent German Studies (B2.2+)

Grades: 9 or 10
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: German 8 or 9 SL or teacher recommendation

This course is designed for students who speak German fluently, either because they have previously been instructed in a German for fluent speakers class, or because they are operating on a B2 level. These students mainly need to improve their written and reading skills to be able to attend the IB German A Language and Literature SL course. Students become successful readers of both literary and non-literary texts, and develop their writing skills for a variety of purposes and audiences. Emphasis is placed on the development of textual analysis, essay writing, creative writing, presentations and discussions. They also learn about major rhetorical devices and their various functions. Additional support is given in improving vocabulary and grammar skills in order to develop the student's academic language.

Fluent I and II German

Grades: 9 or 10
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: German 8 or 9 HL or teacher recommendation

This course is designed to prepare fluent speakers of German for the IB German A SL or HL course. Students become successful readers of both literary and non-literary texts, and develop their writing skills for a variety of purposes and audiences. Emphasis is placed on the development of textual analysis, essay writing, creative writing, presentations and discussions. They also learn about major rhetorical devices and their various functions.

IB German A: Language and Literature SL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: German Fluent I/II Studies or Standard or teacher recommendation

IB German A: Language and Literature SL focuses on the relationship between texts, readers, and the world around them. As indicated by the two names of this course, students will develop analysis skills in fiction and nonfiction and communication skills in speech and writing. We will explore how writers and readers shape meaning, how texts evolve in time and place, and the relationship found between texts. The syllabus includes a range of texts to build critical awareness of style and form in both literary and non-literary texts. In addition to two exam papers and one oral exam, students will engage in regular journal reflections and assessments to build skills mastery.

IB German A: Language and Literature HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit:World Language, 1 credit each year
Prerequisite: German Fluent II Standard or teacher recommendation

IB German A: Language and Literature HL focuses on the relationship between texts, readers, and the world around them. As indicated by the two names of this course, students

will develop analysis skills in fiction and nonfiction and communication skills in speech and writing. We will explore how writers and readers shape meaning, how texts evolve in time and place, and the relationship found between texts. The syllabus includes a range of texts to build critical awareness of style and form in both literary and non-literary texts. In addition to two exam papers and one oral exam, students will engage in regular journal reflections and assessments to build skills mastery.

Fluent I and II Spanish

Grades: 9, 10
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: Teacher recommendation

This course is designed for fluent speakers to develop skills in academic reading, writing and speaking. The focus of this course will be on language structure, grammar, spelling and vocabulary in order to enable students to write and communicate more effectively. Furthermore, they will practice reading comprehension, using both literary and nonfiction texts from authentic Spanish sources. The class will be conducted exclusively in Spanish and students will have the opportunity to further develop their oral language skills in a higher level environment. The course aims to prepare students to access the IB Spanish A curriculum.

IB Spanish A: Language and Literature SL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: Spanish Fluent I or II, or teacher recommendation

IB Spanish A: Language and Literature is a two-year literature and language-based course for mother-tongue students designed to prepare them to take the IB exam at the end of the second year. Students will be engaged in literature and different topics in linguistics like language in a cultural context and the use of language in the media. Students are encouraged to write accurately in a variety of styles and in different voices, matching style to content.

IB Spanish A: Language and Literature HL

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: Spanish Fluent II course or teacher recommendation

IB Spanish A: Language and Literature HL is a two-year literature and language-based course for mother tongue students designed to prepare them to take the IB exam at the end of the second year. Students will be engaged in literature and different topics in linguistics like language in a cultural context and the use of language in the media. Students are encouraged to write accurately in a variety of styles and in different voices, matching style to content. HL students have more class time than SL students.

IB A Literature SL Self-taught

Grades: 11–12 (two-year course)
Subject Area/Course Credit: World Language, 1 credit each year
Prerequisite: Language fluency

In the language A Literature course, students will learn about the various manifestations of literature as a powerful mode of writing across cultures and throughout history. They will explore and develop an understanding of factors that contribute to the production and reception of literature. Students will focus exclusively on literary texts, adopting a variety of approaches to textual criticism. Students who would like to take this course in their first language, although this language is not taught in a classroom at ZIS, will have the opportunity to study this language as a School Supported Self-taught student. They will be expected to meet the same syllabus requirements as for taught SL students. ZIS will support students who decide to take this class. The school will provide a list of competent tutors in that language and ensure that this class is scheduled in the student's school timetable.

Tutored Languages ab initio and Language B

Students are able to study an ab inito or Language B not offered by ZIS. The school will work with families to find an IB trained tutor but the financial arrangements will be between the tutor and the family.

Theory of Knowledge

IB Theory of Knowledge

Grades: 11–12
Subject Area/Course Credit: 0.5 credits per year
Prerequisite: None. Required for all IB Diploma students

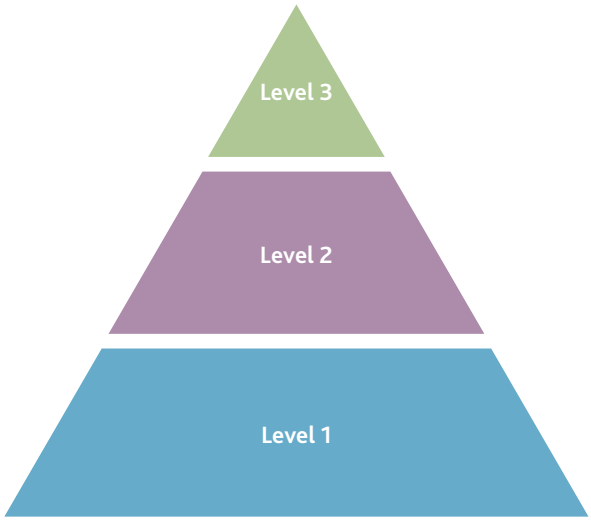
Theory of Knowledge is a compulsory course for all IB Diploma students. The course examines critically the knowledge claims made in the various subject areas and analyzes the methods used to ascertain truth in the separate disciplines. The different ways of knowing are evaluated and compared and their roles in different areas of knowledge are assessed. The influences of culture, language and ethics in our ways of knowing are examined.

Learning Support

Inclusion

ZIS welcomes and celebrates diversity among our student population for the mutual benefit of all. We support an inclusive model of education that serves a managed number of students representing a full range of learning profiles including mild, moderate and intensive needs. The goal of our inclusive model is to provide high quality and challenging learning experiences purposefully meeting the needs of all learners. The whole community shares common rights and responsibilities, working collaboratively towards fulfilling the ZIS Mission, Learning Principles, and Character Standards.

ZIS Multi-Level Support Structure (MLSS)



Level 3
Students formally enrolled in support services, including learning and/or language/counseling support – total around 15% of school population

— Intensive: 1% / Moderate: 2–3% / Mild: 11–13%
Movement from Level 2 to Level 3 happens after full neuropsychological evaluation

Level 2
Short-term intervention e.g. counseling, literacy, maths, language

— Variety of service providers / Maximum 2 sets of 8 weeks typically

Level 1
Proactive for all students by design e.g. curricular, student life, learning principles, advisory, differentiated instruction

— Shared responsibility by all stakeholders

Learning Support

Grades: 9, 10, 11, 12
Subject Area/Course Credit: Student Support, Course credit received, non-graded class
Prerequisite: Teacher recommendation

Learning Support aims to promote and provide academic support services to help students realize their educational goals. Support is provided so that students develop the following skills and competencies:

— Positive student habits (study strategies, time-management, goal-setting, reflection)
— Academic skills
— Self-awareness
— Self-advocacy
— Independence

Support is offered for students on a one-to-one basis or in small groups. Learning Support Teachers assist students in developing strategies to help them achieve success within their mainstream classes. Teachers work closely with the Counselor, Grade Level Leaders, the AP and IB Coordinators and the Assistant Principals ensuring that the needs of students are appropriately met. Learning Support Teachers also work closely with classroom teachers to facilitate differentiation, accommodations and modifications.

Students with diagnosed learning difficulties have an Individual Education Plan (IEP) so that all adults understand how best to accommodate for their different learning needs in the classroom. Learning Support is scheduled into the student's timetable and students may receive credit for participating in the course and demonstrating progress.

Life Skills

Grades: 9,10,11,12
Subject Area/Course Credit: Elective, 1 credit, non-graded class
Prerequisite: Teacher recommendation

This class is designed for students with moderate to intensive learning needs. Life Skills is intended to increase students' knowledge and skills necessary for everyday living. The course focuses on goal-setting, decision making, problem-solving, communication, healthy lifestyles, relationships, current events, nutrition, personal safety and budgeting. This class is also designed to accommodate the specific needs of students by working with families to prioritize skills necessary for independence while considering the interests of students, areas of concern and post-secondary plans. Students will work both on the school campus and in the community to learn skills first hand and experience real-world situations with supervision from the learning support staff.

Online Learning/Independent Study

Pamoja Education

Pamoja Education is the only online course provider that has been licenced by IB to offer IB courses online. Pamoja online IB Diploma Program courses provide students with a global learning experience, preparing them for an internet-enabled world. Over 450 schools around the world currently work with Pamoja.

IB Diploma students at ZIS may enroll in a Pamoja course with costs covered by ZIS

— when an unresolvable schedule conflict occurs
— when ZIS does not offer a particular course that a student transferring from another school needs to continue their studies.

If an IB Diploma student is interested in taking a course through Pamoja that ZIS does not offer, they are able to do so but the fee for this course will be the responsibility of the student's family.

Virtual High School

Upper School students are able to take Virtual High School (VHS) courses as part of their academic program. Most VHS courses last one semester and are worth 0.5 credits each. The VHS Coordinator will provide an orientation into the VHS program and will monitor and support the students throughout their course of study. VHS students are expected to login into their course five times a week. For more information about VHS visit: http://thevhscollaborative.org/

Students in Grades 9-12 may enroll in VHS courses with costs covered by ZIS

— when an unresolvable schedule conflict occurs
— when ZIS does not offer a particular course that a student is required to take, for example AP Physics C
— when needed for credit recovery

Students who wish to take a VHS course that ZIS does not offer, are able to do so but the fee for this course will be the responsibility of the student's family.

Independent Study

Independent study credit may be earned by students in Grades 11 and 12 under the following conditions:

a. The proposed study may not be substituted for an existing and/or required course, unless unavoidable scheduling conflicts arise;
b. The proposed study may be completed by enrolling in a course or doing research at an institution other than ZIS. Costs incurred will be the responsibilityof the student's family;
c. No more than one full credit of independent study may be counted towards credit requirements for graduation;
d. Independent study proposals must be submitted in writing to the Assistant Principal and/or Principal. The proposal must be detailed, specific, and approved by the Assistant Principal and/or the Principal in order to be awarded credit.