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## Introduction

This Course Selection Booklet outlines the course and credit requirements for graduation from ACS Cobham International School.

In addition to earning a High School Diploma, with credits from various subjects (see High School Planner-Appendix A,) students have the opportunity to earn the International Baccalaureate Diploma if they choose to follow the specific combined requirements outlined by the IB. Alternatively students could take Advanced Placement courses and examinations offered by the College Board. Students may also take a combination of IB Courses, Advanced Placement and regular courses. This Course Selection Booklet also provides students and parents with course descriptions, including length of course, credit and where applicable the course prerequisites, to help you make informed, studentappropriate selections. We aim to meet all students requests but, inevitably, limitations in class size and the schedule may prevent some students from taking all of their first choice elective courses or certain course combinations.

## Graduation Requirements

All students who meet the credit requirements graduate with the ACS International Schools College Preparatory High School Diploma. Courses that meet 3 periods per week for one year earn one credit. Credit requirements include a minimum of 20 credits including:

- English: 4 credits from 4 consecutive courses in English
- Mathematics and Sciences: 6 credits (a minimum of 2 in each area)
- Social Studies and World Languages: 6 credits (a minimum of 3 in Social Studies and 2 in one language)
- Fine Arts: 1 credit from drama, theatre, singers, jazz band, chamber ensemble, drawing, painting, ceramics, digital photography, animation, visual art, computer media
- PE: Grades 9-12 ( $1 / 2$ credit per year in 9 th and 10 th grade)

An Honours Diploma is awarded to graduates meeting additional requirements: 24 credits, B average and no grade lower than a C or 3.00 GPA


## The International Baccalaureate (IB) Diploma Programme

Life in the 21st century requires critical-thinking skills and a sense of international mindedness, something that International Baccalaureate ${ }^{\circledR}$ (IB) Diploma Programme students learn to know and understand. The IB Diploma Programme is designed as an academically-challenging and balanced programme of education, with course work as well as final examinations that prepares students for success at university and life beyond. The programme is normally taught over two years and has gained recognition from the world's leading universities.

## The Curriculum

IB Diploma Programme students study six courses - usually three at Higher Level (HL) and three at Standard Level (SL). Students must choose one subject from each of groups 1 to 5 , thus ensuring breadth of experience in languages, social studies, the experimental sciences and mathematics. The sixth subject may be an arts subject chosen from group 6, or the student may choose another subject from groups 1 to 4 . Depth is ensured by requiring 3 or 4 subjects at Higher Level.

In addition the programme has three core requirements that are included to broaden the educational experience and challenge students to apply their knowledge and understanding:


1. The Extended Essay (EE) requires students to engage in independent research through an in-depth study of a topic of interest within a chosen subject.
2. Theory of Knowledge (TOK). This course cultivates the capacity of students to critically reflect upon the foundational presuppositions of their other subjects of study and thus, to think for themselves. The key question of the course is: "How do I know?" TOK distinguishes eight areas of knowledge in which to ask the question. They are mathematics, the natural sciences, the human sciences, the arts, history, ethics, religious knowledge systems and indigenous knowledge systems. By collaboratively inquiring into foundations of knowledge in these area, the course seeks to develop the character of each student as it is exemplified in the IB learner profile.
3. Creativity, Activity, Service (CAS) requires that students actively learn from the experience of doing real tasks beyond the classroom. Students can combine all three components or do activities related to each one of them separately.

The Extended Essay, CAS and TOK courses are now available as single subjects, available to students who are not taking the full IB Diploma. See the IB Coordinator for details.

## Assessment

Students complete assessment tasks in the school, which are either marked initially by teachers and then moderated by external moderators or sent directly to external examiners. Students also take written examinations, which are marked by external IB examiners, in May of the second year.

Grades in each subject range from 1-7 and up to 3 points more can be earned for the Extended Essay and Theory of Knowledge. The diploma is awarded to students who gain at least 24 points, subject to certain minimum levels of performance across the whole programme (for instance, 12 points in 3 Higher Level subjects) and to satisfactory participation in the three core requirements. The highest total that a Diploma Programme student can be awarded is 45 points.

## University Recognition

The IB diploma is a passport to higher education and it is considered to be among the most challenging and demanding university preparation courses that students can take.

## Subject Selection

Students must select a subject from each group. Three subjects are taken at Higher Level and three at Standard level.

## Group 1: Languages A-HL/SL Literature or Language and Literature

Most students take English, but other languages can be offered if there is sufficient interest. Recent examples include Dutch, Japanese, Norwegian, and Swedish. In addition, students may study independently Language A: Literature as a self taught/school-supported subject, at Standard Level only. Recent examples include French, Korean, Polish, Spanish and Thai.

## Group 2: Second Language

English B-HL/SL. Students who select English B must also select a Language A if they are full diploma candidates. French B, German B, Spanish B HL/SL, Japanese or German ab initio SL. In addition, a few students will study other second languages, as a B subject. Please contact the IB Coordinator if interested.

## Group 3: Individuals and Societies

Economics, History, Psychology-HL/SL. Geography HL/SL, Business and Management-SL only, Environmental Systems and Societies-SL only also counts in Group 4.

## Group 4: Experimental Sciences

Biology, Chemistry, Physics-HL/SL, Environmental Systems and Societies-SL (also counts in Group 3), Computer Science, Sports, Exercise and Health Science- SL only.

## Group 5: Mathematics

Mathematics-HL/SL, Mathematical Studies-SL only.

## Group 6: Arts

Music, Theatre, Visual Arts-HL/SL, or another subject from Groups 1-4.
In addition, students must take a Theory of Knowledge course, write a 4000 word Extended Essay on a topic of interest within a chosen subject, and complete over a hundred hours of CAS (Creativity, Activity and Service) over two years.

## Advanced Placement (AP)

Students may gain credit for the High School Diploma by taking AP courses. ACS Cobham offers 18 AP courses; all are one year in duration. All AP courses culminate in an exam administered during the 2-week AP testing period in May. The exam dates are set by the College Board and are non-negotiable. Students taking an AP course should be aware that, according to ACS Cobham policy, they are required to take the course exam in May.

AP courses are fast-paced university level courses requiring strong reading skills and a commitment to independent learning. A high level of self-direction is assumed. Students should note too that the format of the AP exams is a combination of multiple-choice questions and free response, and that the final AP score is a result of the one 2-part exam at the end of the course. A score of AP Courses at ACS Cobham:

3 on an AP examination is generally the equivalent of a C in a college course. Many universities and colleges in the US and Canada offer credit and/or advanced placement for students scoring a 3 or above. At least 3, but preferably 4, AP courses and examinations taken in the Senior year are considered to fulfil the matriculation requirements of universities in the UK. Offers will vary depending on the university or the course. Students applying to UK universities with AP's must also have the High School Diploma and take the SAT Reasoning test to be considered eligible. For individual university requirements see the College Board AP Recognition website.

Students should note that most AP courses have prerequisites; please see the Course Selection Booklet for details. Students and their parents will also be asked to sign a contract confirming that they understand the level of study and commitment required as well as the mandatory nature of the exam at the end of the course.

| 1. Languages | 2. Mathematics |
| :--- | :--- |
| English; Language and Composition <br> English; Literature and Composition <br> French; Language and Composition <br> German; Language and Composition <br> Spanish; Language and Composition | Calculus AB/BC <br> Statistics |
| 3. History \& Social Sciences | 4. Sciences |
| European History <br> Human Geography <br> Microeconomics <br> Macroeconomics <br> US History <br> Psychology | Physics <br> Chemistry <br> Biology |
| 5. Electives |  |
| Computer Science <br> Studio Art 2 <br> AP Seminar |  |

## The Advanced Placement International Diploma (APID)

The APID certifies the achievement of successful AP candidates and is recognised by a number of universities around the world. It was designed to accommodate American and international students at high schools in the US or abroad who are applying to universities outside the US.

To qualify for the APID students must earn AP grades of 3 or higher on four AP exams in three of the five subject areas listed below. Students must take a total of 2 exams in 2 different languages (Subject Area 1) either a science or a mathematics exam and one or more exams from any
subject area not already used.
Subject Area 1: Languages
Subject Area 2:Mathematics
Subject Area 3: History and Social Sciences
Subject Area 4: Sciences
Subject Area 5: Electives
Students do not formally apply for the APID. It is automatically awarded to any AP student who successfully completes the diploma criteria and resides outside the US. Students who meet the criteria and live in the US will be awarded the diploma certificate if they request their AP examination results to be sent to a university overseas.

## AP Capstone: A New Diploma Program

AP Capstone is an innovative new diploma program that gives students an opportunity to apply critical thinking, collaborative problem-solving, and research skills in a cross-curricular context.

AP Capstone is built on the foundation of a new, twoyear high school course sequence - AP Seminar and AP Research - and is designed to complement and enhance the in-depth, discipline-specific study provided through AP courses. It cultivates curious, independent, and collaborative scholars and prepares them to make logical, evidence-based decisions.

Following a successful pilot scheme in other international schools, ACS is pleased to be able to offer this program from 2014. AP Seminar will be offered 2014-15 and AP Research 2015-16.

For more information about the diploma program go to http://www.collegeboard.org/ap-capstone.html, or see Mrs. Briggs, the AP Co-ordinator.

## AP Seminar (Year 1 from 2014) = 1 credit

This foundational course, typically taken in grade 11, provides students with opportunities to think critically and creatively, research, explore, pose solutions, develop arguments, collaborate, and communicate using various media. Students explore real-world issues through a cross-curricular lens and consider multiple points of view to develop deep understanding of complex issues as they make connections between these issues and their own lives.

Students read articles, research studies, and foundational and philosophical texts; listen to and view speeches, broadcasts, and personal accounts; and explore artistic and literary works to gain a rich appreciation and understanding of issues.

Teachers have the flexibility to choose appropriate themes that allow for deep exploration based on student interests, local and/or civic issues, global or international topics, and concepts from other AP courses.

Sample Topics or Themes include:- Education, Innovation, Sustainability, Technology, Revolution

Assessment: Students are assessed through two throughcourse performance tasks and a written exam.

The second course in the AP Capstone experience, typically taken in grade 12, allows students to design, plan, and conduct a yearlong research-based investigation on a topic of individual interest. Through this inquiry and investigation, students demonstrate the ability to apply scholarly understanding to real-world problems and issues.

Students further the skills acquired in their AP Seminar course by using research methodology; employing ethical research practices; and accessing, analysing, and synthesizing information to build, present, and defend an argument.

Assessment: Students are assessed through culminating performance tasks:

- Academic thesis paper (approximately 5,000 words) with a defined structure.
- Public presentation, performance, or exhibition and oral defence of research and presentation


## English - Which Course?

## Choices in HS English for Students Coming into Grade 9

English 9 is the only option available for native level English speakers at ACS Cobham for the 2013/2014 academic year. We are offering a single option for Grade 9 English in order to give students a year of experience in HS before choosing to take the Advanced or Regular paths in Grade 10. English 9 will maintain a suitable level of challenge to prepare students to continue into English 10 Advanced if that is deemed an appropriate choice.

At the end of English 9, there are two paths for native level English students to follow. English 10 Advanced is for those who wish to continue to take IB or AP English courses in Grade 11. English 10 allows students to continue into English 11.
N.B. English 10 Advanced is a challenging pre IB/AP course. Those HS students who wish to be admitted to this course are required to demonstrate sufficient English skills and, more importantly, a good work ethic in English 9. Therefore English 9 students must understand from the outset that their attitude and performance in Grade 9 will be considered for admission to English 10 Advanced. The following factors may be taken into account: work ethic, class performance, standardised test scores, academic integrity.

Transitional English 9 is for non-native speakers whose level of English is deemed by the ACS English Department not yet sufficient to join a native level class. Only when they have reached a suitable level of English competence, determined by their teacher, can these students move into a native level class.

## Choices in HS English for Students Coming into Grade 10

Those who have completed English 9 will usually progress into English 10. Those students currently in English 9 will have the option to progress into English 10 Advanced or to switch to English 10 if advised

Transitional English 10 is for non-native speakers whose level of English is deemed by the ACS English Department not yet sufficient to join a native level class. Only when they have reached a suitable level of English competence, determined by their teacher, can these students move into a native level class. The usual progression from Transitional English 10 is into IB English B.

## Choices in HS English for Students Coming into Grade 11

Those who have completed English 10 Advanced are all eligible for IB/AP English courses. Those who have completed English 10 may continue into English 11 or into IB English B if they are non-native speakers.

Grade $9 \quad$ Grade 10
Grade 11 Grade 12
*Admission to English 10 Advanced is determined by the work habits and English skills demonstrated by students in English 9.
**Students in Transitional English classes can move into regular English classes only when their level of English is deemed to be sufficient by their teacher.


## English 9 = 1 credit

English 9 is designed to develop students' English skills and to prepare them for the demanding courses they may take in Grade 10 and beyond. This course combines the study of both literary and non-literary texts taken from a range of sources. Students will develop their writing and speaking in a variety of genres with emphasis placed on academic writing, speaking and analytical skills. English 9 will maintain a suitable level of challenge to prepare students to continue into English 10 Advanced if that is deemed an appropriate choice.

## Transitional English $9=1$ credit

Transitional English 9 is a course for second language students of English whose language skills are still developing towards near-native level. This course is taken instead of English 9 and is a mandatory course for those students whose level of English is deemed by the school to require an EAL teaching approach. The course employs a wide range of strategies to help students develop their key speaking, listening, reading and writing skills and to support them in their English needs across the curriculum.

## English $10=1$ credit

English 10 is designed to provide an engaging and supportive programme to develop the students' key English skills. The course combines a core of literary study with strands of non-fiction analysis, vocabulary and grammar. The way the course is run allows students to develop their abilities and focus on weaknesses with guided and structured support. Students will be exposed to a wide range of text types and will develop their writing and speaking skills in a variety of genres.

## English 10 Advanced = 1 credit

English 10 Advanced prepares students to take first language IB and AP English courses. This course combines the study of both literary and non-literary texts from a range of sources. Students will develop their writing and speaking in a variety of genres with emphasis on academic writing, speaking and analytical skills. This course is requirement for those planning to take any of the following in Grade 11: IB English A: Literature IB English A: Language and Literature AP Language and Composition AP Literature and Composition.

## Transitional English $10=1$ credit

Transitional English 10 is a course for second language students of English whose language skills are still developing towards near-native level. This course is taken instead of English 10 and is a mandatory course for those students whose level of English is deemed by the school to require an EAL teaching approach. The course will employ a wide range of strategies to help students develop their key speaking, listening, reading and writing skills and to support them in their English needs across the curriculum.


## English 11 = 1 credit

In English 11 students analyse literature and non-fiction, and learn to write effectively. Students may read novels, plays, short stories and poetry. Vocabulary skills will be developed as students explore words from their readings. Grammar instruction will be pursued in response to student writing. In addition to literature, music, video, advertisements, and illustrations will be used to develop media literacy skills. Critical thinking skills will be exercised and developed through the writing tasks described above and through class discussions in response to the selected readings.

## English 12 = 1 credit

In English 12 students analyse literature and nonfiction, and learn to write effectively in different forms. Students read texts from a variety of genres. Writing skills will be developed through a series of activities through vocabulary, routine composition of analytical and evaluative essays, large and small group discussions, grammar instruction, and the composition of a research paper.

## AP English Language and Composition $=1$ credit

Students in the AP Language and Composition (AP Lang) program study rhetoric, the skilful use of language to persuade an audience of an author's claim. Students work with primarily non-fiction texts from the last few centuries up to and including the array of media confronting us today. As well as developing the ability to analyse arguments, students also practice the skills of rhetoric in their own compositions. The AP Language program is designed to provide its students with "exitlevel proficiency" in first year college and university composition courses. The program is reading and writing intensive, and preparation, attendance, and participation are essential for success.

## IB English A Literature, SL/HL = 1 credit

In this course literary texts from different cultures and time periods are considered with attention to language, technique and context. Students learn to develop analytical responses at a high level, both in writing and oral presentations. This is a course for students who are fluent in the English language and who demonstrate good study habits. The major IB assessments include two oral presentations, one literature in translation essay, and two exam essays.

## IB English A Language and Literature, SL/HL = 1 credit

This is an IB English course that may be taken as a Group 1 component of the IB Diploma. It is designed for native level speakers of English. The content of this course is divided between a study of language (in its cultural contexts and in the context of mass communication) and literature (six major literary works studied in depth). The course uses texts chosen from a variety of sources, genres and media. This course may be chosen as an alternative to Language A Literature. It has a similar level of difficulty and generates an equivalent workload.

## IB English B, SL/HL = 1 credit

English B is a two-year IB English course designed for students who have English as a second language but who have had significant previous experience of the language. Grade 11 and 12 students whose language skills are still developing towards native level will be placed in this English course. It may be studied at either Higher or Standard Level.

The main focus of the course is on development of the four primary language skills: listening, speaking, reading and writing. These language skills will be developed through the study and use of a range of written and spoken material from everyday oral exchanges to literary texts.

## Creative Writing and Media $=1$ credit

The ACS Creative Writing and Media course is aimed at students who want to study the conventions and practices of creative writing expressed through various forms of electronic media. Examples include writings such as poetry, the short story, drama (including screenwriting) and media such as television and radio, film and video (including documentaries), and digital communications. Our class will publish virtual portfolios that interweave the art of design with the craft of story telling that we can share and celebrate with others.

## EAL Support

This course provides help and support for those students with EAL needs. Students who are in Transitional English may take this course, which provides them with the opportunity to develop their English language skills across the curriculum. This course is taken as an elective class.

ACS Cobham - High School Mathematics Programs

|  | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :---: | :---: | :---: | :---: | :---: |
| IB | Algebra I <br> Geometry Adv | Algebra II or Algebra II Adv and/or <br> Geometry or Additional Maths | IB Math Studies (I)* <br> IBS 1 <br> $\mathrm{IBH}(1)$ \& Precalc advanced | IB Math Studies (II) <br> IBS (II) $\mathrm{IBH}(\mathrm{II})$ <br> Further Maths |
| AP | Algebra I <br> Geometry Adv | Algebra II or Algebra II Adv and/or <br> Geometry | $\mathrm{IBH}(1)$ \& Precalc advanced <br> Precalculus <br> Probability/Statistics <br> AP Statistics | AP Calculus <br> AP Statistics |
| Non IB AP <br> Itermediate <br> Algebra | Intermediate Algebra <br> Algebra I | Algebra I or Geometry | Algebra II and/or <br> Geometry <br> Business Math <br> Digital Maths (2015) | Probability/Statistics <br> Business Math <br> Digital Maths (2015) |

*There is also a 1 year IBM Studies course available for students capable of taking an accelerated course

## Digital Maths (2015)

*There is also a 1 year IBM Studies course available for students capable of taking an accelerated course Intermediate Algebra $=1$ credit

This course is designed for students who have been challenged by their Pre-algebra course and will contain a solid review of pre-algebraic concepts before the development of algebra 1 topics. Pre-algebra topics are covered in depth in the first semester and Algebra I topics during the second semester.

## Algebra $1=1$ credit

The course starts with a Pre-Algebra review followed by the basic rules of Algebra. The topics then covered are; factorisation, solution of equations, co-ordinate geometry, simplification of algebraic expressions, inequalities, and quadratic functions. Word problems are integrated throughout the course.

## Geometry = 1 credit

Prerequisite: Completion of Algebra 1
This is a medium-paced course which introduces students to the geometrical properties of plane figures, from the basics of lines and angles to right triangle trigonometry, quadrilaterals and other polygons, and circles. There is less emphasis in this course on deductive reasoning and proof, while there is more use of coordinate geometry than in the advanced course.

## Geometry Advanced $=1$ credit

Prerequisite: B grade or higher in Algebra 1
This is a faster paced course which includes such topics as lines and planes, angles, triangles, quadrilaterals and other polygons, the Pythagorean Theorem, right triangle trigonometry, circles, areas of plane figures, volumes of solids, similarity and congruence. Special emphasis is given to proper mathematical notation, deductive reasoning and formal proof.

Additional Mathematics (elective) $=1$ credit<br>Prerequisite: Algebra 1 or Year 9 of a Core Studies course

This course is specifically designed for Grade 10 students who have previously followed an integrated maths course and are intending to take the full IB Diploma and want to prepare for IB Mathematics at Standard Level. The course covers the essentials of geometry, statistics and probability, and right triangle trigonometry, which are necessary to make a successful transition to IB Mathematics in Grade 11. This course is normally taken with Algebra 2.

## Algebra 2 = 1 credit <br> Prerequisite: Algebra 1

This is a medium-paced maths course which reviews and builds on concepts learned in Algebra 1. Students learn to think logically, and to work with equations in various ways, building on techniques acquired in Algebra 1. This class is suitable for those who have taken Algebra 1 and a year of Geometry or it can be taken at the same time as traditional maths. This class is designed to prepare students to take AP Statistics, IB Math Studies or IB Standard Level Math. It is not adequate preparation for IB Higher Level Math.


## Algebra 2 Advanced $=1$ credit

Prerequisite: Geometry Advanced and Algebra 1 grade B minimum.

Algebra 2 Advanced is a fast-paced, challenging mathematical course that is designed to prepare students for IB Standard and Higher Level Mathematics, and AP Calculus. The course builds upon techniques introduced in Algebra 1, such as factoring, radicals, coordinate geometry, descriptive statistics, and quadratic equations. These, as well as additional topics such as functions, trigonometry, exponential functions and logarithms, are developed at a much higher level than in the standard Algebra 2 course.

## Business Mathematics $=1$ credit

Prerequisite: Completion of Algebra 1 or 2
Note: Grade 9 and 10 students may not take this course. Nor may it be taken in conjunction with IB/AP Mathematics courses.

A classic Algebra-based, practical business math course covering an introduction to accounting, finance, insurance,
statistics, and taxation as well as many consumer-math and personal finance applications. Metrics and foreign exchange rate conversions will be included to help students deal with international transactions in the global market.

## Probability and Statistics = 1 credit

Prerequisite: A minimum of a ' B ' in the second semester of Algebra 2 or permission of the instructor.

This course is seen as a solid introduction to Statistics and lays the groundwork for further study at the AP level. Students will explore data by observing patterns and departures from patterns. This study will be enhanced by an efficient use of the statistical menus on the graphing display calculator and exposure to statistical software packages. It will be seen that the course is highly practical as students will develop skills that enable them to produce statistical models that relate to real world situations.

## AP Statistics $=1$ credit

Prerequisite: Ideally students will have a minimum of a ' B ' in Algebra 2 and have satisfactorily completed a full credit in the Probability and Statistics course.

The purpose of this course is to introduce students to the major concepts and tools for collecting, analysing and drawing conclusions from data. A basic understanding of probability theory provides the necessary tool to anticipate and recognise distributions formulated under a chosen statistical model. Statistical inference is used as a guide in the choice of appropriate models. Students will be able to show an efficient use of the statistical menus on the graphing display calculator and will be exposed to computer statistical software packages.

## Precalculus = 1 credit

Prerequisite: An A or B grade in Algebra 2 Advanced or an A grade in Algebra 2.

This is a challenging and rigorous preparatory course for those students that wish to study AP Calculus either at school or at college. The course will cover functions, graphs and practical applications, trigonometry, limits and an introduction to calculus. Further topics in discrete mathematics and data analysis may also be covered.

## AP Calculus (AB) $=1$ credit

Prerequisite: A satisfactory completion of a full credit of Pre-Calculus Advanced or a minimum of a ' B ' in PreCalculus.

This is a demanding college level course where topics in differential and integral Calculus are introduced intuitively and then developed at increasing levels of rigour. Students are expected to demonstrate the efficient use of technology in solving problems and be able to communicate the mathematical solution of problems both orally and in well written sentences.

## IB Mathematical Studies, Standard Level = 1 credit

Prerequisite: Ideally the student will have taken and received credits in Algebra 1, Geometry and Algebra 2 or equivalent courses. This course is designed for the nonspecialist mathematicians who are in the IB programme. This course develops skills needed to cope with the mathematical demands of a technological society without requiring great technical experience.

A wide range of topics is covered: number and algebra, set theory, logic, geometry, trigonometry, statistics and probability, functions, financial mathematics, introductory differential calculus. All students are required to complete a project which is internally assessed and externally moderated. This course will run over two years. A oneyear course for those students capable of covering these topics at an accelerated rate is available.

## IB Standard Level Mathematics = 1 credit

Prerequisite: Students should have completed an Algebra 2 course, achieving a minimum of a B grade.

This course is for students who already have knowledge of basic mathematical concepts and are equipped with the skills needed to apply mathematical techniques correctly. The course provides a sound mathematical background and prepares students for future studies in chemistry, medicine, economics, and business administration. Students will apply their mathematical knowledge to solve realistic problems set in appropriate context. The course has seven major topics in the syllabus, including; algebra, trigonometry, probability and statistics, vectors, matrices, and calculus. It does not have the depth found in the HL mathematics course. Mathematical Studies may be more appropriate for students who do not anticipate a need for mathematics in their future studies.

## IB Higher Level Mathematics/Pre-Calculus Advanced = 1 credit <br> Prerequisites: The minimum entrance requirement for this course is a B+ in Algebra 2 Advanced or an $\mathrm{A}^{*}$ in IGCSE Mathematics with a teacher recommendation.

The first year of this course can also be taken as a Pre-

Calculus Advanced course, for students who meet the entrance requirements, and who might be considering AP Calculus in their senior year. This demanding and rigorous course is for students with a strong background in mathematics who are competent in a range of analytical and technical skills, and who will be expecting to include mathematics as a major component of their university studies, either as a subject in its own right, or within courses such as physics, engineering, economics and technology.

Students are encouraged to apply their mathematical knowledge to solving problems set in a variety of meaningful contexts. Students embarking on this course should expect to develop insight into mathematical form and structure, and should be intellectually equipped to appreciate the links between concepts in different topic areas.

The course has seven major topics in the core syllabus, including; algebra, trigonometry, probability and statistics, vectors, matrices, and calculus. You will also study one specialist optional topic. Students wishing to study mathematics in a less rigorous environment should therefore opt for one of the standard level courses.

## Further Mathematics (elective) $=1$ credit

This course is for students who are already studying IB Higher Maths or AP Calculus and who might want to study more advanced mathematics for the sheer love of the subject.

Science


Guide to Choices in HS Science for Students Coming into Grade 9

Science 9 is the best course for the majority of HS students. It is a balanced course encompassing Biology, Chemistry, Physics, and Environmental Science. This provides students with a strong foundation in all four science disciplines and will give them enough experience of these different disciplines to inform their selection of science courses in grades 10-12. Biology in 9th Grade is for able and motivated science students who are considering a university major in a science or health-related field, for example, engineering, medicine, natural sciences and veterinary medicine. Biology is a demanding honours course and admission to this class is not automatic. In order to follow this path, students need to be able to demonstrate high levels of interest, aptitude and proven performance in science. Admission will be decided on a combination of factors, which may include:

- $\quad$ High grades in science from grade 8
- Standardised test scores e.g. MAP, ERB
- Grade 8 teacher recommendation
- Motivation and work habits in science class
- Academic integrity

Guide to Choices in HS Science for Students Coming into Grade 10

Students must take one science class in Grade 10, although they can take up to three. If they are considering taking biology, chemistry or physics at IB or AP level in 11th and 12th grade, they must take the Grade 10 named course (i.e. biology, chemistry, physics) as a pre-requisite.

Guide to Choices in HS Science for Students Coming into Grade 11 and 12

Students may choose between IBDP, IB Certificate, AP or Regular Honours classes in 11th and 12th grade. IBDP and IB certificate are two-year courses. AP and Honours are one-year courses. Entry into IB or AP biology, chemistry or physics requires the successful completion of a prerequisite course (biology 9 or biology 10 and/or chemistry 10 and/or physics 10). Environmental Science and Sports Science do not require a specified pre-requisite.

## Science $9=1$ credit

Prerequisite: The successful completion of Science 8 or equivalent.

Science 9 is a prerequisite for all other high school science courses. It is based on the IGCSE combined science course, and builds on middle school science. It consists of quarter-long courses in Biology, Chemistry, Physics and the Environment. Strong emphasis is placed on laboratory and fieldwork, data collection, analysis, evaluation, and critical thinking.

Science $10=1$ credit<br>Prerequisites: Successful completion of Science 9.

Science 10 is designed to develop the practical and critical thinking skills of students who enjoy laboratory and fieldwork and problem solving. Students who take this course may take regular science courses or science electives afterwards. It is NOT a prerequisite or sufficient preparation for AP courses or IB courses.

## Biology = 1 credit

Prerequisites: Successful completion of Science 9 or any equivalent course in Science with the achievement of a grade B.

Regular Biology includes the study of cellular structure and function, genetics, evolution, ecology, along with plant and human physiology. Through inquiry of activities and laboratory, students develop an understanding of essential biological principles. In the laboratory, an emphasis is placed on recognition of variables, data collection and processing, analysis and evaluation.

## Physics $=1$ credit

Prerequisites: The achievement of a grade B in the physics component of Science 9.

Regular Physics is intended to be a precursor to pursuing the subject at IB or AP level, so it is mostly aimed at 10th graders who performed well in Science 9 gaining at least a B. It covers a broad range of topics in physics; mechanics, heat, electricity and magnetism, waves and nuclear physics, but at a level only requiring basic algebra and graphing skills. No trigonometry or calculus are required.

## Chemistry $=1$ credit

Prerequisites: The achievement of a grade $B$ in the chemistry component of Science 9.

This is a chemistry course for all 10th graders which builds on 9th Grade science. It aims to build a strong foundation in chemistry as an independent subject and therefore consists of the fundamentally important building bricks in a first High School chemistry course. Formulae, equations, mass-mass and mass-volume relationships all feature heavily in the early part of the course and the ability to carry out the calculations which are intrinsic to the study of these topics must also be considered a prerequisite to this course. Other topics emphasized in the course are atomic structure in detail, periodic trends, bonding, redox reactions and acid/base theory. A parallel practical course runs alongside the theory and the skills to develop a hypothesis and test it, design the investigation, collect raw data, interpret it and draw a conclusion are taught and strengthened in this practical course.

## Human Biology = 1 credit

This elective course is only open to students in Grades 1012. Human Biology is an advanced elective taught over a one-year period. It presents the anatomy of the human body
with a focus on human-biology related issues. Laboratory work and dissections are a requirement. Upon completion, students will be able to demonstrate understanding of cell biology and the human body systems. Strands include the cell; matter, energy, and organisation in living systems; and behaviour of organisms.

## Environmental Science $=1$ credit

Prerequisite: Successful completion of a 10th Grade level science course. This course is only open to students in grades 11 and 12

This course enables students to explore topics that involve the impact of environmental issues such as climate change, ecosystems and biodiversity on society. There will be units on ecology, environmental systems and, time permitting, forensics. Learning is through field and lab work and problem solving. This course is not designed to prepare students for further study in Science at the tertiary level.

## AP Chemistry $=1$ credit

Prerequisites: At least a B in a regular chemistry course is required for entry. In addition, the recommended mathematics prerequisite is the successful completion of a second year algebra course.

AP Chemistry is designed to be the equivalent of a twosemester college introductory chemistry course taken by chemistry majors during their first year. Topics include: stoichiometry, oxidation reduction reactions, precipitation reactions, acid-base reactions, gas laws, kinetic theory of gases, liquids and solids, equilibrium, wave nature of light and atomic spectra, electron configuration in atoms and quantum numbers, periodicity, molecular geometry and covalent bonding, hybridization, rates of reaction, energetics, electrochemistry, complex ions, radioactivity and nuclear decay.

## AP Biology = 1 credit

Prerequisites: At least a B in regular Biology.
AP Biology is designed to be the equivalent of a twosemester college introductory biology course taken by biology majors during their first year. After showing themselves to be qualified on the AP exam, some students, in their freshman year, are permitted to undertake upperlevel courses in biology or to register for courses for which biology is a prerequisite.

Unit topics in the course include: molecules and cells; cellular energetics; heredity and evolution; molecular genetics; evolutionary biology; organisms and populations; structure and function of plants and animals; and ecology.

## AP Physics = 1 credit

Prerequisites: The successful completion of the Regular Physics course in grade 10 or 11 with at least a B.

This is a 1 year course designed to permit students in high school to gain college credit and/or placement in physics by taking courses in school at the introductory level most commonly offered at college and university. Topics include: kinematics; Newton's laws of motion; work, energy, and power; systems of particles, linear momentum; oscillations; gravitation; temperature and heat; kinetic theory and thermodynamics; electrostatics; conductors; electric circuits; magneto-statics; electromagnetism; wave motion; physical optics; geometrical optics; atomic physics and quantum effects; nuclear physics.

## IB Physics, SL/HL = 1 credit

Prerequisites: The successful completion of Regular Physics in Grade 10 or equivalent with at least a grade B.

The topics taught in year 1 incorporate core topics such as Mechanics, Thermal Physics, Oscillations and Waves, Electric Currents, Fields and Forces, Atomic and Nuclear Physics, Energy, Power and Climate. In year 2 the levels split into Higher and Standard classes. The higher level students study the topics in further detail Motion as well as Digital Technology. Both groups also study 2 Options from a selection including Astrophysics, Relativity, Communications, Electromagnetic Waves and Particle Physics. All the students have to produce a portfolio of practical work, made up of approximately 25 experiments and a project.

## IB Biology, SL/HL = 1 credit

Prerequisites: At least a B in regular Biology is required.
This is a 2 year course in which all the students cover common ground in Grade 11 and then split in Grade 12 into Higher or Standard Levels. Strong emphasis is placed on laboratory and fieldwork, data collection, analysis and evaluation. In addition the students carry out a science project of about 10 hours duration. Topics include: statistical analysis; cells, the chemistry of life; genetics; ecology and evolution; and human health and physiology.

## IB Chemistry, SL/HL = 1 credit

Prerequisites: At least a B in regular Chemistry is required.
IB Chemistry is a pre-university course taken over two years. All students take the same course in the first year, and then separate into Standard or Higher Level in the second year. Topics studied include: the second law of thermodynamics and some of its applications; some of the fundamental ideas underlying quantum theory; spectroscopic analysis; electronic structure and the periodic table; organic compounds, their chemical behaviour and their place in everyday life; organic reaction mechanisms; electrochemistry and its links to industry.

## IB Environmental Systems and Society, SL = 1 credit <br> Prerequisites: Successful completion of Grade 10 Biology

or equivalent, i.e., Chemistry or Physics with at least a ' $C$ ' and demonstrated proficiency in basic arithmetic functions, use of descriptive statistics, use of standard scientific notation, using and constructing charts, column graphs, histograms and pie charts to display and interpret data, use of the scientific method and lab report writing.

This is a standard-level, two-year trans-disciplinary course that can be used to meet IB requirements for group 4 experimental sciences and/or group 3 individuals and societies. Topics include: The modern environmental movement; Environmental perspectives; Ecosystems; Systems theory; Biodiversity; Conserving biodiversity; Population dynamics; Resources as natural capital; Energy resources; Water resources; Soil resources; Food resources; Succession; Pollution management; Climate Change. This is a rigorous IB Diploma Course. Students looking to complete credit requirements in science only should take Environmental Science.

## IB Sports, Exercise and Health Science, SL $=1$ credit

 Pre-requisites: Successful completion of Biology, Chemistry or Physics 10 with a C or above.This course is taken over two years. The Sport Exercise and Health Science course incorporates the disciplines of anatomy, physiology, biomechanics, psychology and nutrition, which are studied in the context of sport, exercise and health. A combination of syllabus content and experimental work provides the opportunity for students to acquire the knowledge and understanding necessary to apply scientific principles and analyse human performance. The curriculum provides excellent preparation for university courses including those specifically related to Sport, Sports Science or Physical Education.


## Social Sciences

## World History I = 1 credit

This course is a survey of World History from pre-historic times to the Renaissance. The geography, government, religion and achievements of non-western (Middle Eastern, Indian, Chinese, Islamic, and Japanese) and western (Greek, Roman, Byzantine, Medieval Europe) civilizations are explored through discussions, presentations, essays and field trips. The aim of World History I is to provide students with the knowledge and skills to become independent thinkers, using logic and analysis, with a degree of human understanding, in their study of the past. The course is designed to be relevant to today's issues, as students learn to take part in an increasingly complex world environment.

## World History II = 1 credit <br> Prerequisite: World History I

World History II is intended to provide an overview of the last three hundred years and the myriad ways in which that story has shaped the world we live in today. By studying the major events and individuals of the past, students will develop a greater appreciation for those who have come before them and hopefully allow these lives and lessons to help shape their own values and ambitions. Students are assessed based on a combination of daily homework assignments, class participation, individual and group projects, open note quizzes and closed-note tests.

## United States History = 1 credit (Combined with AP US History)

The US History course begins with the European colonization of the Americas and covers the political, economic, social and cultural aspects that have shaped the development of the United States till present. Students will acquire a body of knowledge and skills that will enable them to understand how the above disciplines are related to each other and contributed to US history.

## Economics $=1$ credit

This is a year long course designed for students in Grades 11 and 12. It serves as an introduction to economics and economic theory. Students who are interested in economics, but do not wish to take an IB certificate or AP course in the subject should select this course. This is NOT a prerequisite for AP Economics.

## AP Human Geography $=1$ credit

The purpose of the AP Human Geography course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in
their science and practice. This course also covers the first year of IB Geography.

## AP United States History $=1$ credit

AP US History covers the period from Native American societies through to the current administration. This period is examined through the political, diplomatic, economic, social, cultural and philosophical disciplines. Students are expected to acquire knowledge of the period and understand how these disciplines relate in the development of US history.

## AP European History $=1$ credit

Prerequisites: At least a B in the end-of-year World History I examination in Grade 9, or equivalent. Students should have the ability to read challenging texts independently with a high level of motivation and commitment. This is an extremely fast paced advanced placement course, offered to qualified Grade 10 students and open to students in Grades 11 and 12. Students must gain teacher approval to take this course.

The course, a 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 we live. Without this knowledge, we would lack the context for understanding the development of contemporary institutions, the role of continuity and change in present day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, the goals of the AP program in European History are to develop (a) an understanding of some of the principal themes in modern European History, (b) an ability to analyse historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

## AP Psychology $=1$ credit

This class is meant to provide a brief overview of psychology and its relevance in the field of social studies. Like all AP classes, this is a university-level course with a great deal of content to cover. On average, students are responsible for completing notes on one chapter of the textbook every one-to-two weeks. Keeping a fast pace is essential in being adequately prepared for the AP test in May. Students who do not keep up with the reading will find that their grades in class and on the exam suffer greatly. We also develop understanding through open-note chapter quizzes and closed-note, AP-style tests at the end of each three-chapter unit. Class participation and formal writing assignments are also used as assessment methods.

## AP Economics: Microeconomics and Macroeconomics

Prerequisite: B grade or higher in two previous years of high school mathematics.

AP Economics is a rigorous and demanding university level course that covers the essentials of microeconomic and macroeconomic theory. We offer the two component halves as separate courses, AP Microeconomics and AP Macroeconomics. Each course prepares students for an AP examination in May. Students are free to take both courses in the same year, or consecutively over two years. For those taking the course over two years the required sequence is Microeconomics in Grade 11, followed by Macroeconomics in Grade 12.

The courses are delivered through a combination of lecture presentation and discussion, requiring mature study and note-taking skills of students. Most practical work, designed to consolidate new concepts and theories, is done outside class time. Homework consists of extensive reading in the text and supplemental reading material, numerical and graphical worksheets, essay writing, and practice AP free response questions. Students are required to master fundamental theory and apply their knowledge to written, numerical and graphical problems. The application of theory to numerical and graphical examples and case studies is an essential skill, along with an analytic approach to problem solving. To achieve success in the class students must be highly motivated, self-directed and deeply curious about the fundamental processes that underlie human social interaction in the market economies of the world. These courses place a premium on mathematical skills and understanding.

## AP Microeconomics $=1$ credit

Microeconomics is the study of individual decisionmaking in an economy, focusing on the motivations and actions of consumers, firms and government. It incorporates the analysis of product and factor markets, the structure of competitive markets, international trade, and market failure.

## AP Macroeconomics $=1$ credit

Macroeconomics is the study of group decision-making within the American economy, focusing on the aggregate actions of consumers and firms and the role of government fiscal and monetary policies. It attempts to measure economy-wide phenomena and the effect of government actions in realizing national economic goals.

## IB Business and Management, SL = 1 credit

This two-year course promotes the importance of exploring business issues from different cultural perspectives, encouraging a holistic view of the world of business.

Year 1 curriculum: business organization and environment, human resources

Year 2 curriculum: accounts and finance, marketing,
operations.
IB Business and Management draws from such a varied range of sources that it is suitable for most occupations. It is widely accepted by universities for many diverse courses and employers recognise its strong practical respectability. Future careers may include management, retailing, marketing, sales, accountancy, research, the civil service and consultancy. This course will provide students with a wide range of transferable skills and can, therefore, be useful in many other subjects and careers.

Skills gained in the course include: development of the capacity to think critically about individual and organisational behaviour; enhancement of the student's ability to make informed business decisions; appreciation of the nature and significance of change in a local, regional and global context; awareness of social, cultural and ethical factors in the actions of organizations and individuals in those organizations; appreciation of the social and ethical responsibilities associated with businesses operating in international markets.

Students will learn through a variety of methods including class discussion, individual work and study, exam-focused teaching, presentations, and a scheduled programme of assessment and revision to reinforce learning.

## IB Economics, SL/HL = 1 credit

IB Economics is a demanding course in the foundations of modern economic thought. Its syllabus covers a diverse range of economic topics, including microeconomics, macroeconomics, international economic and development economics. IB Economics satisfies the Group 3, Individuals and Societies, component of the IB Diploma Programme. The course is delivered through a combination of lecture presentation, class discussion, and directed work, requiring mature study and note-taking skills of students. Much of the practical work designed to consolidate new concepts and theories is done outside the class as homework. Homework consists of extensive reading in the text and supplemental reading material, essay writing, data response questions, and numerical and graphical worksheets. Students are required to master essential theory and apply their knowledge to a variety of essay questions and data response / case study problems. A holistic approach to the overlapping sections of the syllabus is essential, for the IB rarely confines essay and data response questions to any one area. To achieve success in the class and subsequent IB examination students must be highly motivated, self-directed and dedicated, and deeply curious about the fundamental processes that underlie human social interaction in the nations and economies of the world. Both the Higher Level and Standard Level courses require mastery of the skills necessary to write long evaluative essays and analyse data response questions. In addition, the Higher Level course requires the mathematical skills necessary to demonstrate mastery of economic theory through solving numerical questions and explaining the meaning of mathematical answers.

## IB History, SL/HL = 1 credit

The IB History course provides a framework for the study of major issues relevant to life in the 21st century. The aim of the course is to stimulate interest in and enthusiasm for the study of the past and to promote understanding of the background to current international issues. All students study selected topics from nineteenth and twentieth century world history.

European history is used as the foundation for studying, while references are drawn to non- European cultures for comparative purposes and to develop global themes. Over two years, students will survey issues from the causes, practices and effects of war, to the rise and rule of singleparty states and the Cold War. All students will write an investigation of 2000 words on a topic of his, or her, own choice. In addition, all students write two exam papers at the end of year two based on essay questions and source analysis. Students who choose higher level history, study in further detail, nineteenth and twentieth century history from Tsarist Russia to the collapse of Communism and write a third exam paper.

Students who have done well in this course are those who have a keen interest in current events, enjoy reading and participating in discussion and debate and can present a clear written argument in English. Students who may wish to study or follow careers in law, business management, public administration, the media or social sciences will find this course develops relevant skills but should also consider studying history at this level because it is challenging and interesting.

## IB Psychology, SL/HL = 1 credit

Psychology investigates how, when and why we think, feel and behave as we do. Through developed research methodological skills, students look at psychology from three different perspectives: biological, cognitive, and socio-cultural. They also look deeper at one to two additional topics, depending on whether they choose SL or HL. Students should be able to analyse and evaluate theories and empirical studies related to each level of analysis and the optional topics. Questions such as, why do people form groups? Why do we forget and how accurate are our memories? How can we distinguish a 'normal' person from an 'abnormal' person? These are some of the subjects we look at. Students also complete their own experimental study and report for their Internal Assessment.

## IB Geography, SL/HL = 1 credit

IB Geography is a two year course that embodies global and international awareness in several distinct ways. It examines key global issues, such as poverty, sustainability and climate change. It considers examples and detailed case studies at a variety of scales, from local to regional, national and international. Throughout the course, teachers have considerable flexibility in their choice of examples and case studies to ensure that Diploma Programme Geography is
a highly appropriate way to meet the needs of all students, regardless of their precise geographical location. Inherent in the syllabus is a consideration of different perspectives, economic circumstances and social and cultural diversity.

Assessment in the class involves essay type tests, homework and projects. Assessment for the IB Diploma includes Paper One Core Themes, Paper Two Optional Themes, and a Project involving original research; additionally for Higher Level, there is Paper Three Higher Level Extension.

## Global Studies - elective $=1 / 2$ credit

Global Studies focuses on the cultural, political, environmental, scientific, and economic issues of modern times and prepares students to become citizens of the world. Topics and themes include global issues such as food and population, the spread of disease, human rights, sustainable development, empowerment of women, indigenous peoples, causes of poverty, ecological degradation, and migration. Students will develop public speaking skills through a series of debates related to the topics. The debate format requires students to work in teams of four.

## World Languages - Which course?

Depending on students' previous experience in the various languages on offer, there are several pathways to follow. See the progression chart below, and consult the course descriptions.

| $9^{\text {th }}$ grade | $10^{\text {th }}$ grade | $11^{\text {th }}$ grade | $12^{\text {th }}$ grade |
| :---: | :---: | :---: | :---: |
| Level 1 | Level 2 | Level 3 | Level 4 |
| Level 2 | Level 3 | Level 4 | AP |
| Level 3 | Level 4 | AP/IB S1 | IB S2 |
| Level 4 | AP/IB S1 | IB S2 | IB H |
|  |  | AB 1 | AB 2 |

## French 1 = 1 credit

This one-year course introduces students to the French language and culture. It promotes listening, speaking, reading and writing skills so that students can communicate in the language at a basic level in a Frenchspeaking country.

## French $2=1$ credit

Prerequisite: French 1 or Middle School French 1B with a $C$ or higher in the second Semester or in the language exam.

This is a one-year course that reviews and reinforces skills learned in the first year. By the end of this course, students should be able to communicate ideas related to the present, past and future. Cultural content continues to play an important part of this course.

## French 3 = 1 credit

Prerequisite: French 2 with a C or higher grade in the second semester.

French 3 will develop and deepen students' knowledge and language skills. The objective is to complete vocabulary acquisition of the basic topics and start developing more advanced listening, speaking, reading
and writing skills. You will be able to read contemporary articles on a variety of topics and talk about your personal experience as well as learn more about French culture and French-speaking countries. This course is for you if:

- you enjoy communicating in a foreign language and want to improve your accuracy and fluency. You must be prepared to learn grammar rules and new vocabulary by heart as you will be tested on them on a regular basis
- you are in Grade 9 and you are planning to take IB French Standard Level in the future. Join French 3 now, and then continue with French 4 in Grade 10, the following year
- you are in Grade 10. After completing French 3, Grade 10 students can join the AP or IB program (IB French Standard Level only) or continue with French 4.


## French $4=1$ credit

Prerequisite: French 3 with a C or higher Grade in the second semester.

French 4 consolidates and extends the work done in French 3. Students continue to develop their listening, speaking, reading and writing skills. They will refine their knowledge of grammar and vocabulary and prepare for $\mathrm{AP} / \mathrm{IB}$ classes, which they will take in the following year. This course is for you if

- you enjoy communicating in French and want to develop your accuracy and fluency
- you have good study habits and are organized
- you are prepared to work hard independently.


## AP French $=1$ credit

Students planning to take AP French should join the first year of the IB SL course. AP candidates will require extra work and preparation for the AP exam.

## IB French B, SL/HL = 1 credit

Language B is a foreign language course for students with some previous experience of the language. The main focus of the course is on language acquisition and development in the four primary language skills: listening, speaking, reading and writing. These language skills are developed through the study and use of a range of written and spoken material, such as films, literary texts and topics related to the French speaking countries. Language B students learn how to communicate effectively in a number of situations and within the culture(s) where the language is spoken. In the Higher Level classes, students will study two works of Literature.

Please note: In order to study IB French at Higher Level, you must have completed French 4 in Grade 9, IB SL first year French in Grade 10. In Grade 11 you will complete the SL course, taking the examination at the end of Grade 11 and then study for the Higher Level in the language in $G$

## German

| Routes: | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :---: | :---: | :---: | :---: | :---: |
| Classic route German as a foreign language | German 3 | German 4 | IB B Standard First Year | IB B Standard Second Year |
| German as a Second Language Route a | No German Or German 3 | No German or German 4 | IB B Higher First Year | IB B Higher Second Year |
| German as a Second Language Route b | German 4 or German 3 | IB B Standard First Year | IB B Standard Second Year | No German or IB B Higher |
| NEW: Native Speaker Route | No German | IB B Higher as preparation for Lang Lit (only for those who have decided that they want to take German Lang \&Lit in Grade 11) | IB Language \& Literature First Year Standard Level | IB Language and Literature Second Year Standard Level |
| IB Ab Initio (Foreign language for beginners) | No German | No German | Ab Initio German 1 | AB Initio German 2 |

## German 1 = 1 credit

This one-year course introduces students to the German language and culture. It promotes listening, speaking, reading and writing skills so that students can communicate in the language at a basic level in a Germanspeaking country.

## German $2=1$ credit

Prerequisite: German 1 or Middle School German 1B with a $C$ or higher in the second Semester or in the language exam.

This is a one-year course that reviews and reinforces skills learned in the first year. By the end of this course, students should be able to communicate ideas related to the present, past and future. Cultural content continues to play an important part of this course.

## German 3 = 1 credit

Prerequisite: German 2 with a $C$ or higher grade in the second semester.

German 3 will develop and deepen students' knowledge and language skills. The objective is to complete vocabulary acquisition of the basic topics and start developing more advanced listening, speaking, reading and writing skills. You will be able to read contemporary articles on a variety of topics and talk about your personal experience as well as learn more about German culture and German-speaking countries. This course is for you if:

- you enjoy communicating in a foreign language and want to improve your accuracy and fluency. You must be prepared to learn grammar rules and new vocabulary by heart as you will be tested on them on a regular basis
- you are in Grade 9 and you are planning to take IB German Standard Level in the future. Join German 3 now, and then continue with German 4 in Grade 10, the following year
- you are in Grade 10. After completing German 3, Grade 10 students can join the IB program (IB German Standard Level only) or continue with German 4.


## German 4 = 1 credit

Prerequisite: German 3 with a C or higher Grade in the second.

German 4 consolidates and extends the work done in German 3. Students continue to develop their listening, speaking, reading and writing skills. They will refine their knowledge of grammar and vocabulary and prepare for IB classes, which they will take in the following year. This course is for you if

- you enjoy communicating in German and want to develop your accuracy and fluency
- you have good study habits and are organized
- you are prepared to work hard independently.


## IB German ab initio, SL only $=1$ credit

The language ab initio courses are language courses for beginners, designed to be taken over two years by students who have no previous experience of learning German. The main focus of the course is on the acquisition of language required for purposes and situations usual in everyday social interaction. The course is very fast-paced and students have to be prepared to revise grammar and vocabulary independently on a regular basis. The course develops a variety of linguistic skills, and a basic awareness of German, Austrian and Swiss culture through the study of a topic based syllabus.

## IB German B, SL = 1 credit

Language B is a foreign language course for students with some previous experience of the language. The main focus of the course is on language acquisition and development in the four primary language skills: listening, speaking, reading and writing. These language skills are developed through the study and use of a range of written and spoken material, such as films, literary texts and topics related to the German speaking countries. Language B students learn how to communicate effectively in a number of situations and within the culture(s) where the language is spoken. In the Higher Level classes, students will study two works of Literature.

## IB German Language and Literature, SL

This is an IB German course that may be taken as a Group 1 component of the IB Diploma. It is designed for native level speakers of German. The content of this course is divided between a study of language (in its cultural contexts and in the context of mass communication) and literature ( 4 major literary works studied in depth). The course uses texts chosen from a variety of sources, genres and media.

## Spanish

Spanish $1=1$ credit

This one-year course introduces students to the Spanish language and culture. It promotes listening, speaking, reading and writing skills so that students can communicate in the language at a basic level in a Spanishspeaking country.

## Spanish 2 = 1 credit

Prerequisite: Spanish 1 or Middle School Spanish 1B with a $C$ or higher in the second semester or in the language exam.

This one-year course expands the students' ability to speak, read, write and listen. The course includes a greater use of tenses, interactive oral practice, cultural articles and stories, and writing short compositions. By the end of the course, students are able to understand a native speaker within the limits of acquired vocabulary.

## Spanish 3 = 1 credit

Prerequisite: Spanish 2 with a C or higher grade in the second semester.

Spanish 3 will develop and deepen students' knowledge and language skills. The objective is to complete vocabulary acquisition of the basic topics and start developing more advanced listening, speaking, reading and writing skills. You will be introduced to Hispanic literature and be able to talk about your personal experiences as well as learning more about Spanish speaking countries and their culture. This course is for you if:

- you enjoy communicating in a foreign language and want to improve your accuracy and fluency. You must be prepared to learn grammar rules and new vocabulary as you will be tested on them on a regular basis
- you are in Grade 9 and are planning to take IB Spanish Standard Level in the future. Join Spanish 3 now, then continue with Spanish 4 in Grade 10 the following year
- you are in Grade 10. After completing Spanish 3, Grade10 students can join the AP or IB program (IB Spanish Standard Level only) or continue with Spanish 4. Grade 11 students may continue with Spanish 4 or join the AP program.


## Spanish 4 = 1 credit

Prerequisite: Spanish 3 with a C or higher Grade in the second semester.

Spanish 4 consolidates and extends the work done in Spanish 3. Students continue to develop their listening, speaking, reading and writing skills. They will refine their knowledge of grammar and vocabulary and prepare for AP/IB classes, which they will take in the following year.

This course is for you if:

- you enjoy communicating in Spanish and want to develop your accuracy and fluency
- you have good study habits and are organized
- you are prepared to work hard independently.


## AP Spanish = 1 credit

Students planning to take AP should join the first year of the IB SL course. AP candidates will require extra work and preparation for the AP exam.

## IB Spanish B, SL/HL 1 credit

Language B is a foreign language course for students with some previous experience of the language. The main focus of the course is on language acquisition and development in the four primary language skills: listening, speaking, reading and writing. These language skills are developed through the study and use of a range of written and spoken material, such as films, literary texts and topics related to the Spanish speaking countries. Language B students learn how to communicate effectively in a number of situations and within the culture(s) where the language is spoken. In the Higher Level classes, students will study two works of Literature.

Please note that in order to study IB Spanish at Higher Level, you must have completed Spanish 4 in Grade 9, IB SL first year Spanish in Grade 10. In Grade 11 you will complete the SL course, taking the examination at the end of Grade 11 and then study for the Higher Level in the language in Grade 12.

## Mandarin

## Mandarin 1 = 1 credit

This introduction to the Mandarin language and some of the cultures in which it is spoken develops listening, speaking, reading and writing skills at a basic level. Students with little or no background in the language will find this suitable for developing their communication skills in the world's most widely-spoken language. Grades 9-12.

## Mandarin 2/ IB Mandarin ab initio $=1$ credit

Prerequisite: successful completion of Mandarin 1, a course of a similar level or ability to demonstrate an adequate level of competence in Mandarin as assessed by the Mandarin teacher.

Mandarin 2 builds on skills already developed. Students in grades 10 and 11 who have completed at least Mandarin 1 or equivalent may also work on IB Mandarin ab initio, which is organised around three themes: Individual and Society, Leisure and Work plus Urban and Rural Environment.

According to the IB syllabus, "Each theme has a list of topics that provide the students with opportunities to practise and explore the language as well as to develop intercultural understanding. Through the development of receptive, productive and interactive skills, students should be able to respond and interact appropriately in a defined range of everyday situations." Students may be at different levels with respect to their command of the language, so there will be opportunities to show initiative in learning independently. Students will be able to sit the external IB Mandarin ab initio examination, at Standard Level, in May 2016 or 2017, either as an individual IB course or as part of the IB Diploma. Grades 10-11.

## Mandarin IB B-2 $=1$ credit

Prerequisite: successful completion of Mandarin B IB-1, or a course of a similar level.

According to the IB, "The main focus of the course is on language acquisition and development of language skills. These language skills should be developed through the study and use of a range of written and spoken material." The course prepares students for the external IB exam, at Standard Level, in May 2015. Grade 12.


## Japanese

## IB Japanese ab initio, SL only $=1$ credit

Unlike European languages, students of Japanese have to learn a completely different writing system as well as an equally different sound system. The writing system is considered to be the most complicated one in the world and the sound system is categorised as Isolated Language in the field of linguistics.

For the written forms, students have to learn two sets of
phonograms that both consist of 71 letters and also 160 kanji (Chinese characters). Yet learners are given only 46 minutes to master the first set of phonograms and for the other set, 2 weeks. In order to achieve such speed, the teaching method employs a psycholinguistic approach. In addition, students experience the formation of ideograms and logograms through learning kanji over the period of one and a half years.

The course starts with only the spoken form for 5 weeks. The teaching method for the spoken form at this stage is Direct Method, using 100 words. While students learn them, they develop the sound system, the basic syntax and how to interact with each other, which is a way to learn the Japanese manner/politeness.

The course includes lessons in calligraphy, typing and table manners in a traditional Japanese restaurant as part of the cultural experience.

## OTHER IB LANGUAGES

If there is sufficient demand for the same language and curriculum, and if an appropriate teacher is available, then other IB Language courses may possibly be offered in IB Literature, IB Language and Literature or IB Language B.

Please see the descriptions of IB English courses for general overviews of the various curricula, which are the same for all IB languages. Please consult with the IB Coordinator about requests for other IB Languages.

IB Languages A (Literature) can be studied at Standard Level as a school-supported self-taught option. Please consult with the IB Coordinator about this option.

## Grade 10 Languages

If there is sufficient demand for the same language, and if an appropriate teacher is available, then we may be able to offer two classes per week of Language 10. This course helps students to keep up their own language and to understand the options that might be available to them in the IB. Current classes include Danish, Dutch, Japanese, Norwegian, Russian and Swedish.

## Grade 9 Languages

9th Grade students wishing to take classes to maintain their native language should check with the Native Language Enrichment (NLE) coordinator for availability.

## The ARTS

## Drama

All courses (Except IB courses) are electives and fulfil the Fine Arts graduation requirement. Students are strongly advised to take a Music course in Grades 9 and 10.

## Drama $=1$ credit

Prerequisites: There are no pre-requisites for this course, but it is a recommendation for students who wish to continue with Theatre studies at IB level.

Drama at high school level explores performance skills (acting and directing) and theatre production. The Drama course consists of several units including acting, film study, dance and play production, and includes practical work such as theatre games, group work, improvisation, presentation of scenes and dialogues. Emphasis is placed on learning through doing, on creativity, on productionbased work and on mixed-media exercises.

## IB Theatre SL/HL = 1 credit

This course is a theoretical and practical exploration: theatre in the making, theatre in performance and theatre in the world. Typically students study a range of theatre practitioners and practices, with a detailed focus on Bunraku and Commedia del Arte. In October each year the IB Theatre 1 class designs, creates and stages the Haunted House. Students are also obliged to attend the 3-day ISTA TAPS practical workshops and theatre experience, usually in October. Students also attend and observe several theatre productions in London as part of the course. Students are expected to develop skills as an actor, director, designer and dramaturg (theatre researcher).

## Music

All courses (Except IB courses) are electives and fulfil the Fine Arts graduation requirement. Students are strongly advised to take a Music course in Grades 9 and 10.

## Chamber Ensemble $=1$ credit

This course is designed to give the student a participatory class in music performance and ensemble playing on their instruments, whilst preparing for music department concert and assemblies. Challenging chamber music that caters for a variety of instruments including piano and string is used. The course also includes composition, music theory, aural, music appreciation and general musicianship. Students should be of approximately Grade 5/6 Associated Board standard on their chosen instrument
and should be able to read music fluently. Chamber Ensemble members are required to take private music lessons.

## High School Singers $=1$ credit

This course is designed to give the student a participatory class in musical performance of the voice. Using a variety of music from all genres including the latest pop and jazz music, students will develop music reading skills, ear training and ensemble singing as they prepare for school concerts and assemblies. Emphasis is also given to vocal training, warm-ups and vocal improvisation. The course also includes composition, music theory, aural, music appreciation and general musicianship. No previous experience is required. Students should have a general sense of musical pitch and a good ear.

## Jazz Band = 1 credit

This is a course in jazz improvisation and ensemble playing and a participatory class for instrumentalists of intermediate and advanced level. Students will learn the techniques of jazz improvisation using traditional and contemporary compositions and prepare for music department concerts and assemblies. The course also includes composition, music theory, aural, music appreciation and general musicianship. Students should be of approximately Grade 5/6 Associated Board standard on their chosen instrument, and should be able to read music fluently-including percussionists and bass-guitarists. Guitarists need to be able to read and play barred chords. Not suitable for strings, flute, oboe and bassoon.

## IB Music, SL/HL = 1 credit

The IB music course provides an appropriate foundation for further study in music at university level or in music career pathways. It also provides an enriching and valuable course of study for students who may pursue other careers. The course entails the study of musical genres and styles from around the world, the study of prescribed work, solo or group performance and composition.

## Prior learning

The IB music course is designed to offer students the opportunity to build on prior experience in music while encouraging a broad approach to the subject and developing new skills, techniques and ideas. Students are strongly advised to take a Music course in Grades 9 and 10. It is desirable to have achieved a minimum level of ABRSM Grade $5 / 6$ in performance and ABRSM Grade 5 in Theory. While prior music experience is not mandatory at SL, it is recommended. At HL it is very strongly recommended.

## Visual Arts

All courses with the exception of IB and AP courses are electives and fulfil the Fine Arts graduation requirement.

If you are considering a future career in the arts, you will need to do a variety of art classes that will contribute towards your skills resume and portfolio.

Careers and Pathways: University/career plans: to work in the visual arts: fine artist/ illustrator/ graphic designer (digital and print)/ fashion designer/ theatre and set design/ shoe design/ costume design/ interior design/ product and furniture design/ textile design/ animation.

Most UK BA degree courses in the visual arts require you to complete a one year Foundation Course in Art and Design or a two year BTEC Course. Application to these courses is direct to the institution, rather than through UCAS. Places are given based on a portfolio of work, either physically or virtually on a website or photo sharing web site (such as Flickr). Ultimately, the portfolio of artwork will be the only deciding factor in whether you are offered a place or not. However, having at least an IB Visual Art course qualification might be a requirement for some courses (Kingston insist on 24 points from a range of IB courses).

US universities offer broad or specialist arts courses. The admissions tutors that have visited ACS from Institutions such as Savannah College of Art and Design, Ringling and Maryland Institute College of Art have said that they require a portfolio of a range of work. Some other institutions have their own portfolio requirements which means that they set a series of tasks that the students need to complete and then submit direct to the admissions office.

## High School Pathways

| Grade 9 | take any Visual Arts course; Media <br> Class |
| :--- | :--- |
| Grade 10 | take any Visual Arts Course |
| Grade 11\&12 | AP Art <br> IBDP or IB Visual Art as part of a cer- <br> tificate programme |
|  | Continue to take Visual Arts electives <br> of your choice in order to build up <br> your portfolio (eg. Gde 9: Ceramics, <br> Grade 10: Drawing, Grade 11: Photog- <br> raphy, Grade 12: Painting). |

## Drawing $=1$ credit

Prerequisites: None required. You will learn basic drawing techniques and how to use and control various drawing mediums such as charcoal, pencil, tonal chalk, pastels and pen and ink. You will learn how to use perspective and study the basic anatomy of the human figure as it relates to artists. The course work involves a lot of drawing
exercises and drawing projects to help you develop your technical skills and powers of observation. You will also learn and apply the principles of composition and colour theory. Your work will need to be put in historical and cultural context, so research into the work of artists from different cultures and times will inform the practical work that you do. Much of the information that you gather and drawing exercises will be recorded in your sketchbook: the presentation and development of this is fundamental to your progress in this course. You will enjoy this course if you like drawing, making artwork, want to develop your creative side, want to find out about art and artists. You will not enjoy this course if you lack confidence with art materials, don't enjoy writing or finding out about art and artists.

## Painting = 1 credit

Prerequisites: None required.
This is a course for students with an interest in the visual arts. It is intended to expose students to a variety of different media, such as watercolour, acrylic, drawing inks and ultimately oil paint. Emphasis will be on the use of the paintbrush as a tool for drawing, so not only demanding the student to develop skills of precision and control, but also gesture and expression. The course focuses on colour and the way this is used to create space, depth, mood and atmosphere. Students will mainly work from life and develop their ability to see and coordinate this with the method of applying the media. The activities experienced will be exercises that allow students to sharpen their observation skills as well as longer project based activities that will put studio work into cultural and historical context. Much of the information that you gather and ideas that you develop will be recorded in your sketchbook: the presentation and development of this is fundamental to your progress in this course. You will enjoy this course if you like drawing, making artwork, want to develop your creative side, and want to find out about art and artists. You will not enjoy this course if you lack confidence with art materials, don't enjoy writing or finding out about art and artists.

## Animation $=1$ credit

Prerequisites: None required.
In Animation, you will learn how to write, plan and produce 2-D and 3-D animation projects done both mechanically and digitally, including stop-motion with plasticine or paper, and Flash animation. You will also learn about visual story-telling, scriptwriting, filming and editing techniques and study design principles applicable to different animation methods. Cultural and historical traditions of animation arts will also be studied and used in the planning of work. You will work with digital cameras to film stop-motion animation projects and with computers to create Flash animations. Students will work individually and collaboratively to plan and produce short projects. A digital camera with manual focus capability and a camera tripod will be needed during the filming of some projects.

## Animation $=1$ credit (Continued...)

You will enjoy this course if you like storytelling, working with computers and working on long-term projects. Most of the coursework must be done in the studio and producing animation takes time, patience and good organization skills. Drawing skill is not important, but imagination and persistence are very important. You will not enjoy this course if you lose interest in long-term projects, dislike using computers, or you are not interested in visual storytelling.

## Ceramics and Sculpture $=1$ credit

Prerequisites: None required. In Ceramics, you will learn how to design and construct functional and decorative ceramics using clay and various hand-building methods such as pinch, coil and slab construction. Surface decoration techniques, including applying slips and glazes will also be covered. Wheel throwing is not covered in the course. You will also learn and apply design principles related to functional and decorative ceramic forms. Cultural and historical aspects of the ceramic arts will be studied and applied to studio projects. In Sculpture, you will learn and apply the basic techniques and observation skills used in additive and subtractive sculptural art and produce projects that develop technical skills, spatial perception, design awareness and imaginative abilities using the mediums of cardboard, clay, plaster, wood and mixed media. The history and cultural traditions of 3-D art will also be studied and applied to the development of sculpture projects. You will also learn and apply design principles applicable in 3-D plastic arts. You will enjoy this course if you like working with your hands and don't mind getting dirty at times. Most of the coursework must be done in the studio so you will need to be able to use the studios after school or during a study hall to complete some projects. The course also includes periodic research assignments, so you must also be interested in learning about sculptural arts and artists. You will not enjoy this course if you are not confident working with your hands or dislike getting your hands dirty or do not have time to occasionally work in the studio after school.

## Digital Photography $=1$ credit

Prerequisites: None required. In Photography, you will learn how to use the controls of the digital camera and how to measure light accurately for good exposure. You will also learn and practice principles of photographic composition and creating pictures that tell a story. You will learn about the history of photography, and how to make pictures of specialized subject matter including long exposure night photography, portraits, surrealistic composites and landscape photography.

You will learn how to use Photoshop on computers to improve your digital images and to manipulate your photographs for creative results. There will be some introduction to the use of a darkroom and chemical photography through projects such as photograms,
using pinhole cameras and making photo silk-screen prints. Students must have a digital SLR camera that has manual exposure capability to take the course. Examples are Nikon D3100, D5100, Canon EOS 1000D, 1100D, etc. Students will also need a tripod and a remote control cable release, and provide their own photo inkjet paper during the course. You will enjoy this course if you are interested in understanding how a camera works and how the technical aspects of the camera and computer editing contribute to the final photographic image. Much of the shooting for the course is done out of class, so you must be willing to devote the time to shooting assignments after school and on weekends in a timely way to do well in the course. You will not enjoy this course if you are not interested in learning the technical and theoretical aspects of photography or you do not have the time to devote to doing the shooting assignments in a timely way.

## AP Studio Art = 1 credit

Prerequisites: At least one full credit studio course (Drawing/ Painting/ Ceramics/ Photography) or equivalent is very strongly recommended. Students with little technical skills or prior experience in art will struggle with the coursework. Students without such credits or experience may only apply to do AP Art in exceptional circumstances. The AP Studio Art course is a one year course designed for students with a serious interest in developing strong technical and design skills in visual art.

The course offers three portfolio options: Drawing, 2D Design and 3D Design. AP Studio Art is not based on a written examination or extensive writing or research. Instead, students submit portfolios of studio work to the AP for evaluation at the end of the course. Each of the portfolios asks the student to demonstrate a depth of investigation and process of discovery through the Concentration section. In the Breadth section, the student is asked to demonstrate a serious grounding in visual principles and material techniques. The Quality section permits the student to select the works that best exhibit a synthesis of form, technique, and content. You can find more specific course information about the AP Studio Art course syllabus online.


You will enjoy this course if you are interested in further developing strong technical and design skills in a variety of art media, you are prepared to work in the studio outside of class time on your assignments, and if you are self-directed and independent. The portfolios require the production and submission of a significant amount of studio work of high quality and this will take time and persistent effort.

You will not enjoy this course if you don't have much technical skill in art, or are not interested in the technical and design aspects of visual arts, or are unable or unwilling to spend time in the studio perfecting your skills.


IB Visual Arts, SL/HL = 1 credit
Prerequisites: At least one full studio course (Drawing/ Painting/Ceramics/Photography/Animation) or equivalent. Students without such credits may only apply to do IB Art in exceptional circumstances.

The IB Visual Arts program takes place over two years and culminates documentation of studio work, research (Investigation Workbooks). Students have to be able to discuss work as a response to an area of research that they have independently undertaken. They ought to be able to situate the work in relation to their culture and show that this work has also been informed by cultures other than their own. Students must also be able to relate their work to interests and practices of artists both contemporary and from previous eras or genres. The course is designed to enable student to achieve these objectives. The IB Visual arts course begins with teacher-led assignments that show processes, procedures, and activities that reveal the scope of the subject. By the third quarter of the first year, student will have more input into the direction of their work.

After a busy summer holiday consolidating studio work and research, students arrive back at school for the start of the second year with a theme that they have developed themselves. This theme forms the basis for the research that they continue to explore and to which their work responds. Students will produce between 10-20 pieces of work over the two years, though there will be other works that are produced but not considered for the final
assessment. Their research is recorded in a series of workbooks, referred to as the Investigation Workbook or the IWB. This substantial body of work forms $40 \%$ of a student's grade and so it is important they are comfortable with doing a considerable amount of documentation of activities. The Studio component is worth $60 \%$.

Successful IB Visual Arts candidates have typically taken Art courses in 9th and 10th grades. They should have a strong drawing background to do the course, even if they ultimately choose to represent their work through media such as film, performance or photography. Courses such as Drawing, Painting, Ceramics and Sculpture are ideal preparation for entry into the IB Visual Arts program.

You will enjoy this course if you are prepared to work outside of class time on you assignments; you are aware that this course is research-based activity; if you are selfdirected and independent.

You will not enjoy this course if you don't like drawing, making imagery with drawing media, or if you don't enjoy reading and researching.

## Physical Education

Physical Education (Grades 9 and 10 only) $=1$ credit (in conjunction with Health 9 and 10)

The purpose of the physical education program is to prepare students for the challenges of the 21st century by providing opportunities to attain the skills and knowledge to be physically active as part of a healthy lifestyle. Students will become competent in various movement forms, motor skills and social interaction skills in addition to learning to enjoy physical activity. There are end of quarter written tests that focus on the basic rules and strategies of each topic covered throughout the year. Additionally, the fundamental skills are continually assessed in a game situation following a rubric format. You will enjoy this class if you are willingly active and eager to participate in all types of movement forms. You will succeed in this class if you put forth consistent effort and enjoy the benefits of leading an active lifestyle.

Health 9 and Health 10 (required, but no single credit weighting unless in conjunction with PE)

Health at ACS is specifically designed to meet the needs of a unique student body that comes from all over the world. The curriculum is tailored to meet the emotional, physical and social needs of adolescents, teaching them the skills to be thoughtful decision-makers.

Topics include drugs, alcohol, tobacco and relationships. The goal of the Health course is to empower each student to be able to make healthy, safe and knowledgeable choices with regards to lifestyle and their bodies. Classes are often discussion-based with students sharing their own points of view; this is combined with activities and multimedia.

Fitness for Life (Elective for Grades 11 and 12 only) $=1 / 2$ credit

The purpose of the Fitness for Life course is to prepare students for the challenges of the 21st century by providing opportunities to attain the skills and knowledge to be physically active as part of a healthy lifestyle. Student activity options are chosen from the following list (based on class size and interest): basketball, soccer, volleyball, tennis, swimming, softball, golf, touch-rugby, ultimate Frisbee, badminton, fitness and weight training, dance, flag football, aerobics, yoga/Pilates, walking/jogging, circuit training, and other student-generated possibilities.

## Sports Science $=1 / 2$ credit

The purpose of this course is to investigate human performance and analyse the stresses it places on the body. Sports and Exercise Science concerns the study and application of scientific principles to the performance of a sport or sporting action. The principles applied to analyse and improve performance have a profound effect on the ability of an individual to lead a healthy lifestyle as well
as experience success in sport. Students should become competent in areas of basic anatomy, exercise physiology, motor skill acquisition and sports psychology. This course is for students interested in learning more about the world of Sports Science and exploring all of the career opportunities in the exercise sciences.

## IB Sports, Exercise and Health Science, SL = 1 credit

 Prerequisites: Successful completion of Biology, Chemistry or Physics 10 with a C or above.This course is taken over two years. The Sport Exercise and Health Science course incorporates the disciplines of anatomy, physiology, biomechanics, psychology and nutrition, which are studied in the context of sport, exercise and health. A combination of syllabus content and experimental work provides the opportunity for students to acquire the knowledge and understanding necessary to apply scientific principles and analyse human performance. The curriculum provides excellent preparation for university courses including those specifically related to Sport, Sports Science or Physical Education.


## Computer \& Information Technology

All courses are electives with the exception of IB and AP courses. Courses marked FA* may be used for Fine Arts credit.

## New Media (FA*) = 1 credit

New Media explores a variety of media formats from print to internet video podcasts, from radio to music videos. The course investigates traditional techniques from the early days of photography, filmmaking and print design as well as utilizing 21st Century technology. Posting student work on the internet through YouTube and Vimeo allows their work to be seen by an international audience.

## Journalism $\left(F A^{*}\right)=1$ credit

This is a practical, work related course. Students learn by investigating the world of journalism and completing projects and assignments based on realistic workplace assignments.

The course focuses on print and broadcast journalism and includes the practical skills of interviewing, article and feature writing, photo journalism, page layout and design, as well as projects and assignments which will prepare students to work freelance. The course explores media theory, news values, understanding the world of journalism content and style, genre, representation audiences and institutions.

Students use industry standard software packages such as Photoshop, Illustrator, Indesign as well as broadcast video software like Final Cut Pro to complete their projects. Journalism is a project based course, where students produce double page spreads, tabloid and broadsheet front pages as well as work for the monthly school magazine.

## Yearbook $\left(F A^{*}\right)=1 / 2$ credit

Students who choose Yearbook as an elective have the opportunity to work in an authentic workplace setting, developing a diverse range of skills including: interpersonal communication, interview techniques, IT, graphic design, desktop publishing, teamwork, time management, project management and leadership skills. Students considering the Yearbook as an option need to be able to work as part of a team, be flexible, willing to learn new skills and be committed to getting work completed to an agreed but tight time frame.

## Java Programming $=1$ credit

Prerequisite: Completion of Algebra 1
This course provides experience with the Java programming language. Students learn how to write, compile and execute Java programs, including computer games. Java's object-oriented features are explored and fundamental ideas in computer architecture are covered. Practical applications of programming-robots, Arduinos
and Lilypads-are also covered. Java programming is a prerequisite for both IB and AP Computer Science, and should normally be taken in Grade 9 or 10. Previous programming knowledge is not assumed but may be helpful.

## Topics in IT $=1$ credit

In this course students explore current and emerging technologies in the world of online applications, social media and communication. This is a hands-on course that seeks to build foundational knowledge of Internet based technologies and digital citizenship by leveraging new and emerging programming and scripting languages and tools. This is a student led learning type course where students use desktops, laptops, iPads and smartphones to pursue projects based on areas of interest, such as management information systems, web programming, video and digital photography or developing smart phone apps. No previous knowledge or technical experience is required.

## AP Computer Science $A=1$ credit

Prerequisite: Completion of Java Programming or equivalent, or programming experience

AP Computer Science A introduces students to the fundamentals of computer science. It teaches objectoriented programming methodology with a concentration on problem solving and algorithm development using Java. Students enrolled in the course would normally have completed Java Programming, a project-based course designed to provide hands-on laboratory work to allow students to experiment with using the Java language. The course prepares students for the AP Computer Science examination offered by the College Board, and is meant to be the equivalent of a first-semester college-level course in computer science. It also includes the study of data structures, design, and abstraction. Students spend about $40 \%$ of the overall course time writing Java programs.

## IB Computer Science $=1$ credit

Prerequisite: Completion of Java Programming (or equivalent) or programming experience. Completion of AP Computer Science is recommended.

IB Computer Science provides an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. It draws on a wide spectrum of knowledge and so there is much reading involved. The course is underpinned by computational thinking, which involves the ability to think procedurally, logically, concurrently, abstractly, recursively and think ahead while utilizing an experimental and inquiry-based approach to problemsolving. Early in the first year of the course each student is expected to identify a real-world problem or unanswered question and design a prototype computational solution, which $\mathrm{s} / \mathrm{he}$ will implement and test as part of the internal assessment.

## High School Curriculum

## Appendix A: High School Planner

| SUBJECT | MINIMUM CREDIT <br> REQUIREMENTS | GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 |
| :--- | :---: | :--- | :--- | :--- | :--- |
| ENGLISH | 4 |  |  |  |  |
| MATHEMATICS | 2 of 6 <br> mathematics and science |  |  |  |  |
| SCIENCE | 2 of 6 <br> mathematics and science |  |  |  |  |
| SOCIAL STUDIES | 3 of 6 <br> social studies and world <br> languages |  |  |  |  |
| WORLD LANGUAGES | 2 of 6 <br> social studies and world <br> languages |  |  |  |  |
| ARTS | 1 |  |  |  |  |
| PHYSICAL EDUCATION |  |  |  |  |  |
| ELECTIVES |  |  |  |  |  |

## Appendix B: Electives

Courses marked FA* count towards the Fine Arts Credit

Animation $F A^{*}=1$ credit
Prerequisites: None required.
In Animation, you will learn how to write, plan and produce 2-D and 3-D animation projects done both mechanically and digitally, including stop-motion with plasticine or paper, and Flash animation. You will also learn about visual story-telling, scriptwriting, filming and editing techniques and study design principles applicable to different animation methods. Cultural and historical traditions of animation arts will also be studied and used in the planning of work. You will work with digital cameras to film stop-motion animation projects and with computers to create Flash animations. Students will work individually and collaboratively to plan and produce short projects. A digital camera with manual focus capability and a camera tripod will be needed during the filming of some projects. You will enjoy this course if you like storytelling, working with computers and working on long-term projects. Most of the coursework must be done in the studio and producing animation takes time, patience and good organization skills. Drawing skill is not important, but imagination and persistence are very important. You will not enjoy this course if you lose interest in long-term projects, dislike using computers, or you are not interested in visual storytelling.

## Ceramics and Sculpture (FA*) = 1 credit

Prerequisites: None required.
In Ceramics, you will learn how to design and construct functional and decorative ceramics using clay and various hand-building methods such as pinch, coil and slab construction. Surface decoration techniques, including applying slips and glazes will also be covered. Wheel throwing is not covered in the course. You will also learn and apply design principles related to functional and decorative ceramic forms. Cultural and historical aspects of the ceramic arts will be studied and applied to studio projects. In Sculpture, you will learn and apply the basic techniques and observation skills used in additive and subtractive sculptural art and produce projects that develop technical skills, spatial perception, design awareness and imaginative abilities using the mediums of cardboard, clay, plaster, wood and mixed media. The history and cultural traditions of 3- dimensional art will also be studied and applied to the development of sculpture projects. You will also learn and apply design principles applicable in 3-D plastic arts. You will enjoy this course if you like working with your hands and don't mind getting dirty at times. Most of the coursework must be done in the studio so you will need to be able to use the studios after school or during a study hall to complete some projects. The course also includes periodic research assignments, so you must also be interested in learning about sculptural arts and artists. You will not enjoy this course if you are not confident working with your hands
or dislike getting your hands dirty or do not have time to occasionally work in the studio after school.

## Creative Writing and Media Course $=1$ credit

The ACS Creative Writing and Media course is aimed at students who want to study the conventions and practices of creative writing expressed through various forms of electronic media. Examples include writings such as poetry, the short story, drama (including screenwriting) and media such as television and radio, film and video (including documentaries), and digital communications. The class will publish virtual portfolios that interweave the art of design with the craft of story telling that we can share and celebrate with others.

## Digital Photography (FA*) - 1 credit

Prerequisites: None required.
In Photography, you will learn how to use the controls of the digital camera and how to measure light accurately for good exposure. You will also learn and practice principles of photographic composition and creating pictures that tell a story. You will learn about the history of photography, and how to make pictures of specialized subject matter including long exposure night photography, portraits, surrealistic composites and landscape photography. You will learn how to use Photoshop on computers to improve your digital images and to manipulate your photographs for creative results.

There will be some introduction to the use of a darkroom and chemical photography through projects such as photograms, using pinhole cameras and making photo silk-screen prints. Students must have a digital SLR camera that has manual exposure capability to take the course. Examples are Nikon D3100, D5100, Canon EOS 1000D, 1100D, etc. Students will also need a tripod and a remote control cable release, and provide their own photo inkjet paper during the course.

You will enjoy this course if you are interested in understanding how a camera works and how the technical aspects of the camera and computer editing contribute to the final photographic image. Much of the shooting for the course is done out of class, so you must be willing to devote the time to shooting assignments after school and on weekends in a timely way to do well in the course.

You will not enjoy this course if you are not interested in learning the technical and theoretical aspects of photography or you do not have the time to devote to doing the shooting assignments in a timely way.

## Drama (FA*) - 1 credit

Prerequisites: There are no pre-requisites for this course, but it is a recommendation for students who wish to continue with Theatre studies at IB level.


Drama at high school level explores performance skills (acting and directing) and theatre production (backstage, design work and tech crew training). The Drama course consists of several units such as acting, film study, dance, play production and includes practical work such as theatre games, group work, improvisation, presentation of scenes and dialogues. Emphasis is placed on learning through doing, on creativity, on production-based work and on mixed- media exercises.

## Drawing (FA*) = 1 credit

Prerequisites: None required.
You will learn basic drawing techniques and how to use and control various drawing mediums such as charcoal, pencil, tonal chalk, pastels and pen and ink. You will learn how to use perspective and study the basic anatomy of the human figure as it relates to artists. The course work involves a lot of drawing exercises and drawing projects to help you develop your technical skills and powers of observation. You will also learn and apply the principles of composition and colour theory. Your work will need to be put in historical and cultural context, so research into the work of artists from different cultures and times will inform the practical work that you do. Much of the information that you gather and drawing exercises will be recorded in your sketchbook: the presentation and development of this is fundamental to your progress in this course.

You will enjoy this course if you like drawing, making artwork, want to develop your creative side, want to find out about art and artists. You will not enjoy this course if you lack confidence with art materials, don't enjoy writing or finding out about art and artists.

## Economics $=1$ credit

This is a year long course designed for students in Grades 11 and 12. It serves as an introduction to economics
and economic theory. Students who are interested in economics, but do not wish to take an IB certificate or AP course in the subject should select this course. This is NOT a prerequisite for AP Economics.

## Further Mathematics

This course is for students who are already studying IB Higher Maths or AP Calculus and who might want to study more advanced mathematics for the sheer love of the subject.

Global Studies $=1 / 2$ credit
Global Studies focuses on the cultural, political, environmental, scientific, and economic issues of modern times and prepares students to become citizens of the world. Topics and themes include global issues such as food and population, the spread of disease, human rights, sustainable development, empowerment of women, indigenous peoples, causes of poverty, ecological degradation, and migration. Students will develop public speaking skills through a series of debates related to the topics. The debate format requires students to work in teams of four.

## High School Singers $\left(F A^{*}\right)=1$ credit

This course is designed to give the student a participatory class in music performance of the voice. Using a variety of music from all genres including the latest pop and jazz music, students will develop music reading skills, ear training and ensemble singing as they prepare for school concerts and assemblies. Emphasis is also given to vocal training, warm-ups and vocal improvisation. The course also includes composition, music theory, aural, music appreciation and general musicianship. No previous experience is required. Students should have a general sense of musical pitch and a good ear.

## Chamber Ensemble $\left(F A^{*}\right)=1$ credit

This course is designed to give the student a participatory class in music performance and ensemble playing on their instruments, whilst preparing for music department concert and assemblies. Challenging chamber music that caters for a variety of instruments including piano and string is used. The course also includes composition, music theory, aural, music appreciation and general musicianship. Students should be of approximately Grade 6 Associated Board standard on their chosen instrument and should be able to read music fluently. Chamber Ensemble members are required to take private music lessons.

## Java Programming $=1$ credit

In this course you will learn how to write, compile and execute Java programs, used for writing computer games, and gain experience with Java's object-oriented features. Fundamental ideas in computer architecture are covered and students learn to write games and program Finch robots as practical applications of programming. Java programming is a prerequisite for both IB and AP Computer Science, and should normally be taken in Grade 9 or 10. Previous programming knowledge is not assumed but may be helpful. A strong background in Algebra is helpful.

## EAL support

This course provides help and support for those students with EAL needs. Students who are in Transitional English may take this course, which provides them with the opportunity to develop their English language skills across the curriculum. This course is taken as an elective class.

## Jazz Band (FA*) = 1 credit

This is a course in jazz improvisation and ensemble playing and a participatory class for instrumentalists of intermediate and advanced level. Students will learn the techniques of jazz improvisation using traditional and contemporary compositions and prepare for music department concerts and assemblies. The course also includes composition, music theory, aural, music appreciation and general musicianship. Students should be of approximately Grade 5/6 Associated Board standard on their chosen instrument, and should be able to read music fluently - including percussionists and bass-guitarists. Guitarists need to be able to read and play barred chords. Not suitable for strings, flute, oboe and bassoon.

Journalism $\left(F A^{*}\right)=1 / 2$ credit
This is a practical, work related course. Students learn by investigating the world of journalism and completing projects and assignments based on realistic workplace assignments.

The course focuses on print and broadcast journalism and includes the practical skills of interviewing, article and feature writing, photo journalism, page layout and design, as well as projects and assignments which will prepare students to work freelance. The course explores media theory, news values, understanding the world of journalism content and style, genre, representation audiences and institutions.

Students use industry standard software packages such as Photoshop, Illustrator, Indesign as well as broadcast video software like Final Cut Pro to complete their projects. Journalism is a project based course, where students produce double page spreads, tabloid and broadsheet front pages as well as work for the monthly school magazine.

## New Media $\left(F^{*}\right)=1$ credit

New Media explores a variety of media formats from print to internet video podcasts, from radio to music videos. The course investigates traditional techniques from the early days of photography, filmmaking and print design as well as utilizing 21st Century technology.

Posting student work on the internet through YouTube and Vimeo allows their work to be seen by an international audience.

## Painting $\left(F A^{*}\right)=1$ credit

Prerequisites: None.
This is a course for students with an interest in the visual arts. It is intended to expose students to a variety of different media, such as watercolour, acrylic, drawing inks and ultimately oil paint. Emphasis will be on the use of the paintbrush as a tool for drawing, so not only demanding the student to develop skills of precision and control, but also gesture and expression. The course focuses on colour and the way this is used to create space, depth, mood and atmosphere. Students will mainly work from life and develop their ability to see and coordinate this with the method of applying the media.

The activities experienced will be exercises that allow students to sharpen their observation skills as well as longer project based activities that will put studio work into cultural and historical context. Much of the information that you gather and ideas that you develop will be recorded in your sketchbook: the presentation and development of this is fundamental to your progress in this course.

You will enjoy this course if you like drawing, making artwork, want to develop your creative side, want to find out about art and artists. You will not enjoy this course if you lack confidence with art materials, don't enjoy writing or finding out about art and artists.

## Special Projects Elective = 1 credit

Places on this course are limited - students will be required to get approval for and write x a formal project proposal for admission and satisfy one or more of the following criteria:

- teacher or expert recommendation
- evidence of academic achievement: grades/MAP scores etc.
- a level of knowledge and motivation that allows for autonomous study in their chosen area

The Special Projects elective is a class designed to allow students with a strong interest and a high level of ability in a particular area to pursue this interest through the design, development and completion of a project/projects. The areas chosen can be based on individual academic subjects (e.g. maths, science, history), "real world" activities that may be linked to more than one academic subject (e.g. business, computer programming, graphic design, engineering) or the creative arts. End products will be appropriate to the areas chosen but could be anything from a research essay, to a video production, to a robot. However the students will be required to follow a clearly structured process of proposal, planning, development and reflection on their project that will require the submission of formal written work. This elective focuses not only on the development of knowledge and skills in the students' chosen area, but also on developing skills of research, self organisation and information literacy. Those joining the class will be expected to take considerable responsibility for their own learning.

## Human Biology = 1 credit

Human Biology is an advanced elective taught over a oneyear period. It presents the anatomy of the human body with a focus on human-biology related issues. Laboratory work and dissections are a requirement. Upon completion, students will be able to demonstrate understanding of cell biology and the human body systems. Strands include the cell; matter, energy, and organisation in living systems; and behaviour of organisms.

## Sports Science $=1 / 2$ credit

The purpose of this course is to investigate human performance and analyse the stresses it places on the body. Sports and Exercise Science concerns the study and application of scientific principles to the performance of a sport or sporting action. The principles applied to analyse and improve performance have a profound effect on the ability of an individual to lead a healthy lifestyle as well as experience success in sport. Students should become competent in areas of basic anatomy, exercise physiology, motor skill acquisition and sports psychology. This course is for students interested in learning more about the world of sports science and exploring all of the career opportunities in the exercise sciences.

## Topics in IT $=1$ credit

In this course students explore current and emerging technologies in the world of online applications, social media and communication. This is a hands-on course that seeks to build foundational knowledge of Internet based technologies and digital citizenship by leveraging new and emerging programming and scripting languages and tools. This is a student led learning type course where students use desktops, laptops, iPads and smartphones to pursue projects based on areas of interest, such as management information systems, web programming, video and digital photography or developing smart phone apps. No previous knowledge or technical experience is required.

## Yearbook $\left(F A^{*}\right)=1 / 2$ credit

Students who choose the Yearbook as an elective have the opportunity to work in an authentic workplace setting, developing a diverse range of skills including interpersonal communication, interview techniques, IT, graphic design, desktop publishing, teamwork, time management, project management and leadership skills. Students considering the Yearbook as an option need to be able to work as part of a team, be flexible, willing to learn new skills and be committed to getting work completed to an agreed but tight time frame.

## Curriculum Guide 2014/15

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