

Upper School course offerings 2023-24

TASIS

THE AMERICAN SCHOOL IN ENGLAND

TASIS England Mission Statement



The School's purpose is to realize its core values. We believe that: every learner has the gift of innate curiosity that we can nurture into life-long learning; all our learners can develop the ability and confidence to flourish and become who they truly are; and building a vibrant, joyful, and healthy community of principled, open-minded, and compassionate individuals is why TASIS exists.

COMMITMENTS

We realize our values through our passion as educators and the following commitments:

We promote **multiple pathways** for each learner throughout our school environment, our programs, and our community.

Our commitment to nurturing **intellectual curiosity** prepares each learner for the opportunities and challenges of the future.

We encourage continuous personal **growth** through active **engagement** and desire to seek and learn from experiences. Through a balance of support and challenge, students flourish as creative, reflective, and resilient owners of their learning.

We foster **connections and collaboration** in our community of learners by cultivating supportive relationships and celebrating the unique contributions of each member.

OUTCOMES

The outcomes of a TASIS England education were articulated over many decades through the vision of the School´s charismatic founder, Mary Crist Fleming.

Life-long Learning cultivates curiosity, exploration, and discovery, emboldening individuals to embrace a culture of learning and celebrate the journey of continuous development toward personal fulfillment.

International-mindedness promotes the exploration, communication, and celebration of diversity. Being curious and open-minded to the richness of perspective within our global community creates a desire to flourish through action and service.

Service Leadership fosters empathetic, compassionate, and principled individuals who take responsibility for sustaining healthy relationships with themselves, their families, their communities, and their environment.



Mission Statement of the TASIS Foundation

TASIS is a family of international schools that welcomes young people from all nationalities to an educational community which fosters a passion for excellence along with mutual respect and understanding. Consistent with the vision of its founder, M. Crist Fleming, TASIS is committed to transmitting the heritage of Western civilization and world cultures: the creations, achievements, traditions, and ideals from the past that offer purpose in the present and hope for the future. Seeking to balance the pursuit of knowledge with the love of wisdom, and promoting the skills of lifelong learning, an appreciation for beauty, and the development of character, each school combines a challenging academic program with opportunities for artistic endeavor, physical activity, and service to others. Believing in the worth of each individual and the importance of enduring relationships, TASIS seeks to embody and instill the values of personal responsibility, civility, compassion, justice, and truth.

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The Academic Program

The Academic Program is at the heart of the TASIS England educational experience. Dedicated to helping lead young men and women into an increasing awareness of their individual capabilities, the program provides secondary students with a balanced, liberal, international/American college-preparatory education that is challenging and rewarding. Within this framework, the curriculum embraces the verbal disciplines of English, History, and Foreign Languages; the analytical rigor of Mathematics and Science; the aesthetic appeal of the Arts and Humanities; and the challenges of Physical Education and Sports/Activities. The faculty is dedicated to providing an environment for learning that encourages all students to grow in body, mind, and spirit during their years at TASIS England. All course offerings are conditional. Individual courses will run based on student interest and availability of staffing. Student enrollment in specific courses may be affected by the complexity of the master schedule. Normally, the minimum enrollment for any class to run is six students.

Course Registration Procedure

Returning Students

Students will be asked to complete Course Registration Forms in early spring for the upcoming school year. The Academic Deans, course registration advisor, the College Counselor, and course teachers will give returning students information about course offerings and guidance on selecting appropriate courses.

New Students

New students will receive Course Registration Forms along with their admission materials. They should discuss their course selections with their parents and return the completed Course Registration Form with their parents' endorsement as soon as possible. Scheduling conflicts or full enrollment in elective courses may necessitate changes. New students will meet with the Academic Dean upon their arrival to confirm and finalize their course registration.

Course Load

Students must register for the equivalent of a minimum of five credits per year. The Academic Dean must approve any request to enroll in four or more AP courses, or any exception to the Course Load Policy.

Summer Credit

The TASIS summer school program provides students with enrichment and advancement opportunities. Students intending to pursue math and foreign language courses must submit an application in writing when they return their Course Plan Sheet or prior to the end of school. The appropriate Head of Department (prior to summer vacation) will approve all proposals for advancement.

Academic Honesty

Students are expected to preserve and honor the academic integrity of a TASIS England education. Students found to be responsible for multiple acts of academic dishonesty may be ineligible for certain courses, particularly those with external examinations such as AP or IB.

Graduation Requirements

The requirements for graduation from TASIS England reflect the School's commitment to a balanced, college-preparatory education. These requirements are also based on the belief that within this structure students should gradually take more responsibility for decisions about their academic programs and postsecondary plans. Appropriate guidance will be given through the academic advising system.

College Preparatory Diploma

Department Requirements

English	4 credits
History	3 credits TASIS students will take Ancient & Medieval World in Grade 9 and either Western Civilization or AP European History in Grade 10. In addition, all students who are not IB Diploma Candidates must earn a credit in US History.
Foreign Language	2 credits **TASIS** third-level proficiency in a modern foreign language or English-as-an-Additional Language (EAL). Students must satisfactorily complete at least two levels in the same language in Grades 9–12.
Mathematics	3 credits Algebra II is a required course
Science	3 credits Must include three laboratory sciences
Arts	1 credit
Humanities	1 credit Required in Grade 12; IB candidates in Grades 11/ 12
Physical Education	1 credit (not a college-preparatory credit) Required course in Grades 9 and 10
Sports/Activities	Students in Grades 9 through 12 are required to participate in the afternoon Sports/Activities Program a minimum of twice per week
Future Pathways Course	Students in Grades 9 through 12 are required to participate in this four-year Future Pathways course
Community Service Program	Students in Grades 9 through 12 complete a CSP assignment on or off campus Students in Grades 9 and 10 must complete 10 hours Students in Grade 11 and 12 must complete 20 hours IB Candidates: Creativity, Activity, Service (CAS) requirement
American Civic Literacy Competency	Normally completed through US History or IB TOK

Students attending TASIS for more than two years must accumulate a total of 19 credits in college-preparatory courses in order to graduate.

EAL and International Courses

Students enrolled in English-as-an-Additional Language (EAL) courses are exempt from any other Foreign Language requirement.

Students entering TASIS England at the Intermediate (CEFR A1-2 / WIDA 1-2 / DfE A-B), Advanced (CEFR B1 / WIDA 3 / DfE C), or Proficiency (CEFR B2 / WIDA 4 / DfE D) level of English-as-an-Additional Language (EAL) will be placed in International Section courses and the EAL course appropriate to their grade and English ability, as determined by the English placement tests. Students not taking an EAL course may not normally take International Section courses.

Grading standards for EAL and International Section courses are broadly equivalent to those in other courses, although teachers take into consideration the difficulty students have studying in English before becoming proficient in the language. Grades in these courses are not weighted any differently than those in standard courses for Grade Point Average purposes.

International Baccalaureate (IB) Diploma Programme

IBO Mission Statement

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments, and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate, and lifelong learners who understand that other people, with their differences, can also be right.

The IB Diploma

The International Baccalaureate (IB) Diploma Programme is a two-year program of study. IB Diploma candidates must take a total of six IB courses, one from each of the groups listed in the diagram. Three are taken at Higher Level (HL) and three at Standard Level (SL). HL courses demand more from students in terms of time, conceptual understanding, and assessment activities. Each course spans two years: the eleventh and twelfth grades.



To Receive the IB Diploma, All Candidates Must:

- Take six subjects, one from each group: three at Higher Level and three at Standard Level
- Submit an Extended Essay in one of the IB subjects
- Take a course in Theory of Knowledge and submit an essay
- Complete the requirements of CAS (Creativity, Activity, Service)

An IB Diploma Will Not Be Awarded If a Candidate:

- Receives a grade of 1 in any subject
- Has not completed the Internal Assessment in a course or has been awarded an E
- Has not submitted an Extended Essay or has been awarded an E
- Has not completed a course in Theory of Knowledge or has been awarded an E
- Has not completed the requirements of CAS (Creativity, Activity, Service)

Advanced Placement (AP) Program

Although perceived as an American program, AP courses are approved by the College Board and are recognized for university entrance in over 65 different countries. These one-year long academic courses are similar in nature to a university introductory course. They are among the most rigorous courses offered at TASIS and allow students to study areas of interest in depth. It is recommended that eleventh and tweflth graders do not take more than three AP classes per year, and no more than two for tenth graders, keeping in mind the need for balance in an academic schedule and in life.

TASIS offers the following AP courses:

- Art History
- Biology
- Calculus AB
- Calculus BC
- Chemistry
- Chinese Language and Culture
- Comparative Government
- Computer Science A
- Computer Science Principles
- English Literature & Composition
- English Language & Composition
- Environmental Science
- European History
- French Language and Culture
- Human Geography
- Macro Economics
- Micro Economics
- Music Theory
- Physics 1 & 2
- Physics C: Electricity and Magnetism
- Physics C Mechanics
- Psychology
- Spanish Language & Culture
- Statistics
- US Government
- US History

AP courses culminate with an AP exam during the first two weeks of May. TASIS students taking an AP course are required to sit for the exam. Each exam is scored independently of the course work done in school on a 5-point scale (3 is considered a passing score):

- 5 = extremely well qualified
- 1 = no recommendation

Students list their AP scores on university applications. Engagement in AP courses has a direct link to success in university. Courses are rigorous and thorough and teach students how to write, think, problem solve, and calculate with clarity and authority. AP students are willing to challenge themselves, and develop strong study habits and a rich, university-level knowledge of the subject matter.

Advanced Credit

Many American university systems allow students to use AP credits to skip survey courses and:

- Take advanced courses sooner
- Reduce the number of university core curriculum requirements
- Increase flexibility for students to graduate early, study abroad, participate in internships, double major, or
- Work towards a master's degree.

Universities throughout the world recognize the AP Program and look favorably upon its academically rigorous nature. Additionally, in the UK, the AP is accepted as a valuable qualification for admissions

TASIS Requirements

Ready to take a college level course

- Academic maturity
- Minimum of 95% attendance is required to be successful in all AP classes
- Independent worker
- Strong skills in research, reading, and writing
- Mainstream proficiency in English. Students need to have a score of CEFR B2 to C2 or WIDA 4+ or above to participate in AP courses.

Self Study

In addition to taking AP classes at TASIS, students may self-study an AP subject that is not usually scheduled for examination at our school. Students who intend to pursue this option must consult the AP Coordinator within the first two weeks of school. Please note that university predicted grades for self-studied AP exams can only be submitted if supported by documentation from an AP-trained tutor who has assessed the student over the course of their study.

Course Selection Guidelines

When planning their courses, students should consult the requirements and notes below. Any exceptions will need to be approved by the Academic Deans.

General Requirements

Students normally take up to six credits each year and are expected to proceed through required courses as soon as appropriate and to work through requirements without interruption in areas where this is necessary (e.g., Foreign Language, Mathematics). Students attending TASIS for more than two years must accumulate a total of 19 credits in college-preparatory courses (see "Grading" below) in order to graduate. Please note that most courses at TASIS are year-long courses and cannot be added after the initial drop/add period without permission from the Upper School Leadership Team. The Academic Dean must approve each student's yearly course selection.

Placement Tests

In order to identify strengths and weaknesses and to place students in appropriate levels, all new students enrolled in Mathematics, English-as-an-Additional-Language courses, and Foreign Language courses will take placement tests during the summer through an online testing link.

Course Selection Notes

Students are placed at the appropriate TASIS Foreign Language or English-as-an-Additional-Language and Mathematics levels and must proceed each year until the minimum requirements are achieved. Further Language or Mathematics courses may be taken as electives. Students generally begin to fulfill their Arts requirement in Grade 9 or 10.

Withdrawal Policy

Students who wish to drop a course once they have enrolled may do so within a two-week drop/add period at the start of the academic year. After the drop/add period, students wishing to leave a course will need to request a withdrawal. Students withdrawing within the First Quarter will not receive any credit for the course and the course will not appear on their transcripts. After the First Quarter, withdrawn courses will appear on the transcript, but will not carry credit or affect the student's GPA.

Future Pathways Course

In order to prepare students for their university and college search, the TASIS College Counseling Department developed a four-year Future Pathways course. In Grades 9-10, the course is delivered through Advisory lessons. In Grades 11-2, the frequency increases with the course being offered every other week. All students are required to attend these sessions and follow the session materials posted in Google Classroom.

Further details about the topics covered are available in the College Counseling Programming for Grade 9-12 Students and Families document. Further details about the College Counseling program are available within the Upper School Handbook.

Advanced Placement (AP) Course Eligibility

For returning students, admission to an AP course requires the teacher's approval of the prerequisite course, confirming that the student has fulfilled the necessary requirements for the AP course. For students new to TASIS, teacher discussion and department approval may be required; end-of-year transcripts and letters of recommendation on the application will be carefully considered for admission into an AP class.

It is expected that every student enrolled in an AP class will take the AP Exam in May at the end of the course.

International baccalaureate (IB) Diploma Programme Course Eligibility

Participation in the IB Diploma Programme is limited to eleventh and twelfth grade students who have maintained an average of B or better. Teacher discussion and administration approval is also required.

Students new to TASIS are required to take Mathematics and Foreign Language placement exams both online and on campus to ensure proper placement. Courses are not guaranteed until the on-campus exam is taken.

Common Pathways

While most subject pathways are clear, with prerequisites listed in this booklet, there are multiple options and more complex pathways in the study of foreign languages and mathematics, as described in the charts at the beginning of those sections.

External Examination Fees

Parents will be invoiced for the fees charged for each external exam (e.g., AP, IB, SAT, etc.) taken by their child.

Grade Weighting Policy

TASIS England employs a traditional "A" through "F" grading system, with the grade of:

A+	=97–100%	A	= 93–96%	A-	= 90–92%
B+	= 87–89%	B	= 83–86%	B-	= 80–82%
C+	= 77–79%	C	= 73–76%	C-	= 70–72%
D+	= 67–69%	D	= 63–66%	D-	= 60–62%
F	Failure				

For purposes of computing the Grade Point Average (GPA) used for Honors awards at the end of each semester, the following system is used:

1. Grades are assigned a numerical equivalent according to a four-point system ("A" = 4.0, "A-" = 3.67, "B+" = 3.33, "B" = 3.0, etc.).
2. Half-credit and full-credit courses are weighted accordingly.
3. IB Courses are awarded grades on the 1-7 scale and weighted accordingly.
4. Grades in Physical Education are not counted towards the GPA nor towards the 19 college-preparatory credits required for graduation.

Effort marks are given in each subject to indicate the teacher's estimate of the attitude, cooperation, and effort of the student, regardless of his or her achievement. Effort marks are numerical, on a scale of one(outstanding) to five (unsatisfactory).

Honors lists are compiled at the end of each semester and are based on the semester's grades. The lists are determined as follows:

Highest Honors are awarded for superior academic achievement (3.7 or above GPA).

High Honors are awarded for outstanding academic achievement (3.4 or above GPA).

Honors are awarded for excellent academic achievement (3.1 or above GPA).

Course Offerings

As the following descriptions indicate, TASIS England offers a wide array of courses in each of the major academic disciplines, as well as many others that students may elect to complement particular interests.

Performing and Visual Arts

The department believes that involvement in, and appreciation of, the arts is essential for the full development and education of each individual, and that every student should have the opportunity to experience the growth and enrichment afforded by exposure to, and participation in, the arts. At TASIS England this is achieved through historical study, development of technical and practical skills, and active participation in art, theatre, or music. Students are encouraged to contribute toward recitals, concerts, theatre productions, and art exhibitions. Regular residencies, performances, and lectures by visiting professionals further expose students to excellence in the arts.

Department requirement: One credit

VISUAL ARTS

Introduction to Art .5 Credit

This course involves the study of the elements of design from the practical and historical points of view, with specific aesthetic and technical problems in line, shape, space, color, value, and texture. Both two-dimensional and three-dimensional forms are developed using a variety of materials.

This course is recommended for students in Grades 9 and 10 ***and is a prerequisite for all other visual arts classes.***

Drawing and Painting I .5 Credit

Students in this course continue to study color and design using a variety of techniques and materials, including graphite, ink, watercolor, gouache, acrylic, and oil. Both representational and abstract problems are addressed.

Open to students in Grades 11 and 12 or to students in Grade 10 who have passed Introduction to Art or a similar course in drawing and painting.

Ceramics .5 Credit

This course includes the exploration of clay and its properties, using hand-building techniques of coil, pinch, slab construction, and throwing on the wheel, as well as glazing and firing.

Open to Grades 11 and 12 or to students in Grade 10 who have passed Introduction to Art or a similar course.

Digital Photography .5 Credit

Students will study different photographic techniques, pictorial composition and formal qualities of art, learn from artists and photographers, and discuss issues in photojournalism and fine art photography. Digital Photography will enable students to develop both practical and theoretical skills, alongside those of creativity and self-expression.

Open to Grades 11 and 12 or to students in Grade 10 who have passed Introduction to Art or a similar course.

Introduction to Art History .5 Credit

This course employs an interdisciplinary approach which aims to stimulate intellectual curiosity through studying Art History from ancient Greece to the present day. The course is highly recommended for prospective students of IB Visual Arts, and provides an important foundation for those who will study TOK and AP Art History. The program will also be of benefit to students who wish to study the visual arts from a perspective other than the practical.

Advanced Placement Art History 1 Credit

This course is a chronological study of painting, sculpture, and architecture of the Ancient and Medieval world, Italian and Northern Renaissance and from the Baroque style, and it concludes with 19th–century French painting (Impressionism) and 20th–century European and American art. The course begins with prehistoric cave paintings and continues with the art of Egypt, Greece, Rome, and the classical tradition. Students will also study works of art in the British Museum, and in the second semester will concentrate on art in the National and the Tate Galleries in London. Visits to conduct research in the art galleries are a major part of the course work.

Open to students in Grades 10 and 11 that have successfully completed Introduction to Art History with a B+ or higher. Enrollment this this class in Grades 10 or 11 ***does not*** *satisfy the TASIS England Humanities requirement. Enrollment in this course in Grade 12 satisfies the TASIS England Humanities requirement.*

Prerequisite: Introduction to Art or a similar course; students wishing to enroll in Advanced Placement Courses should maintain at least a "B+" average in all of their previous and current relevant courses of study.

IB Visual Arts

Please refer to the International Baccalaureate (Group 6) section for the full description of this course.

Open to all students in Grade 11as a single-subject IB Certificate alongside the AP track. Entry to the course in Grade 11 is available for students who have completed "Introduction to Art" and a second elective in Grade 9 and 10, or can demonstrate significant prior experience in practical theatre making, at the discretion of the Course Leader.

THEATRE

Students will be assessed during orientation to determine the best placement in our Upper School Theatre courses (Acting 1, Acting II, and Musical Theatre).

Acting I .5 Credit

This course offers students a thorough grounding in acting technique through an eclectic exploration of acting styles and theatre traditions. Students will discover the possibilities of the form, the responsibilities of the actor and the discipline of the craft. Students will explore and develop the tools of acting: the use of the body, the voice, the imagination, the text, the space, their emotions and their fellow actors to create exciting characters within meaningful stories. Students will perform their own work in the Fleming Theatre during the year and the course will be enriched by the Artist-in-Residence program, which enables students to take workshops with professional theatre practitioners.

Open to students in all US grade levels with any level of experience.

Acting II .5 Credit

While Acting I is training-focused, Acting II is practice-focused, offering students the chance to envision, produce and perform two theatre works during the year, one devised and one from a pre-existing text. Students begin to develop their own artistic voice and are encouraged to experiment within the theatre form, widening their creative boundaries. Alongside their performance skills, each student will develop a particular expertise in one area of theatre production (writing, directing, devising, design, lighting or sound). The course will be enriched by a theatre trip to watch a renowned international theatre company as well as further participation in the Artist-in-Residence program.

Open to students in Grade 10, 11 and 12 who have completed Acting I, or a similar course, at the discretion of the Head of Theatre.

Musical Theatre .5 Credit

Students will practically study the repertoire from some of Broadway's most influential productions from the 1930s to the present. Dramatic styles, notable directors, composers, and choreographers will all be examined along with the historical and social context for each style period. The class is performance based, focusing on acting and dance techniques as well as studying the voice as an instrument. At least two showcase performances will be presented.

Prerequisite: Introduction to Acting or its equivalent, or by permission of the Head of Theatre.

IB Theatre

Please refer to the International Baccalaureate (Group 6) section for the full description of this course.

Open to all students in Grade 11 as a single-subject IB Certificate alongside the AP track. Early entry to the course in Grade 10 is also available for students who have completed Acting 1 in Grade 9 or can demonstrate significant prior experience in practical theatre making, at the discretion of the Course Leader.

FILM

Introduction to Film .5 Credit

This highly practical course will introduce students to the essential techniques of filmmaking, developing their creative expression, technical skills, problem-solving, communication, and collaborative skills. Students will explore directing, cinematography, editing, screenwriting, and sound design, while also learning how to watch films with a critical eye. This course allows exploration and experimentation in filmmaking and will be a great development opportunity for those considering a future in the arts, communication, or technology.

Aimed at students in Grades 9 and 10, but open to students in all US grade levels.

IB Film

Please refer to the International Baccalaureate (Group 6) section for the full description of this course.

Open to all students in Grade 11 as a single-subject IB Certificate. Early entry to the course in Grade 10 is also available for students who have completed Introduction to Film in Grade 9 or can demonstrate significant prior experience in practical filmmaking, at the discretion of the Course Leader.

MUSIC

Choir .5 Credit

Open to all students in Grades 9 through 12, regardless of singing experience. The course aims to develop part-singing, sight-reading, and performance skills. All choir members are required to perform in two concerts, in addition to performances at school assemblies and the Graduation ceremony. All singers will have a voice assessment before they join the ensemble.

Chamber Ensemble .5 Credit

Open to all string and woodwind players with a minimum of three years' playing experience and/or have the director's permission to join the ensemble. Students in the ensemble practice the techniques of ensemble playing, whilst learning Baroque, Classical, Romantic, and Twentieth-Century compositions. Members of the ensemble are required to perform in two concerts, in addition to performances at school assemblies.

Upper School Band .5 Credit

Open to all brass, woodwind, and rhythm section instruments, including piano, bass, and drums. Instrumentalists must have a minimum of three years' playing experience and/or have the director's permission to join the ensemble. This course includes symphonic and concert band repertoire, as well as jazz and contemporary. Members of the ensemble are required to perform in a minimum of two concerts, in addition to other school-related performances.

Introduction to Music Theory .5 Credit

Students study the graded music theory syllabus from the Associated Board of the Royal School of Music. Students who pass the examination will receive a certificate from the ABRSM, and the credential of Grade Five Theory, which is the prerequisite for higher-level practical music examinations. This course is suitable for students who are taking grade level examinations in their chosen instrument, and also acts as foundation for the Advanced Placement Music Theory course and IB Music. Textbook: *Music Theory in Practice*, Grades 1-5, ABRSM Publishing

Advanced Placement Music Theory 1 Credit

This course is ideal for those who will take IB Music.

Students who enroll in this course must possess a good working knowledge of music notation, scales, key signatures, and time signatures. The syllabus for this course includes the study of all scales, keys, modes, modulations, and figured bass, as well as an understanding of form, style, and ornamentation. The final examination also includes sight-singing and aural dictation. Textbook: *Tonal Harmony*, McGraw-Hill

Prerequisite: Introduction to Music Theory or by permission from Head of Music.

Open to students in all grades with the approval of the Head of Music; students wishing to enroll in Advanced Placement Courses should maintain at least a "B" average in all of their previous and current relevant courses of study.

Introduction to Music Technology .5 Credit

The introduction to Music Technology course aims to give students the skills and knowledge to create and record music using a laptop computer. Students practice audio and MIDI recording using Apple's *Logic Pro* recording package. Students learn to create audio files, to program music using Midi, and to record live performances. Although there is no prerequisite for the course, students should have a sound knowledge of music notation and a strong interest in recording and composition.

IB Music

Please refer to the International Baccalaureate (Group 6) section for the full description of this course.

Open to all students in Grade 11 as a single-subject IB Certificate alongside the AP track.

Computer Science

The Computer Science Department sees the purpose of computers as enhancing creativity, improving communications, and augmenting intellectual endeavor throughout the TASIS England community. To this end, computer technology instruction is integrated into the courses in other academic departments, and students are given opportunities at each grade level to learn and develop their skills in such areas as word processing, spreadsheets, databases, web page construction and design, and digital audio-visual authoring. All courses described below include an introduction to the hardware, software, and network systems that work together in modern personal computers.

Computer Graphic Design .5 Credit

The purpose of this half-credit course is to help students develop the knowledge and skills necessary to use computer technology as a medium for assisting with the design and manipulation of drawings, photographic media, and other graphic projects. The course will provide an introduction to the principles and techniques of graphic design using the latest computer technology and software. Topics covered will include page layout design, vector-based illustration, typography, and photographic manipulation. There will be instruction on preparing projects for printed publications, computer presentations, and for the World Wide Web. Programs used will include Adobe Photoshop and others within the Adobe Suite. This course counts towards the TASIS art graduation requirement.

Preference will be given to senior students.

Advanced Placement Computer Science Principles 1 Credit

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems and will discuss and write about the impacts these solutions could have on their community, society and the world.

Prerequisites: Algebra I or equivalent. Students should be able to use a Cartesian (x, y) coordinate system to represent points on a plane. Students do not need to have prior knowledge of any programming language.

Advanced Placement Computer Science A 1 Credit

The AP Computer Science A course is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes object-oriented and imperative problem solving and design using the Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

Prerequisites: Students wishing to enroll in AP Computer Science A must have passed Algebra II with a grade of at least a "B."

Advanced Computer Science 1 Credit

This is an advanced course in Computer Science for students looking to continue the study of programming beyond AP Computer Science A. The major emphases in this course are programming methodology, algorithms, and data structures. Applications of computing are used to develop students' awareness of algorithms and data structures to provide topics for programming assignments in which students can apply their knowledge. Java is the programming language for implementing solutions to problems. Topics may include:

- Learning how to design, implement, and analyze the time and space performance of recursive functions, and how recursion relies on the run-time stack.
- Learning classical data structures including lists, stacks, queues, expression trees, binary search trees, heaps, and hash tables.
- Learning how to leverage object-oriented patterns such as composition, inheritance, and polymorphism in the implementation of the above data structures.
- Learning essential searching and sorting algorithms.

Prerequisite: Successful completion of the AP Computer Science A course and exam.

English

This department believes that the teaching of English is essential for the intellectual, social, and personal growth of our students. The words we teach are the raw material from which thoughts and knowledge and values are forged. To study grammar is to study the law and the logic of expression. To write correctly is to communicate with understanding. To study literature is to study Humanity. To speak with skill and to listen with discernment are to be human. Our work in grammar, vocabulary building, composition, and oral presentation teaches essential English skills and builds sound habits of study. Through the reading and study of fictional and non-fictional prose, drama, and poetry, we aim to arouse, sustain, and increase our students' vigor of intellect and the power of their imaginations.

Department requirement: Four credits

Ninth Grade English 1 Credit

This course will give students a solid foundation in the study of language and literature that is necessary for success in future academic courses. It is also meant to spark curiosity and inspire students to make connections between literature and their own lives. Students are introduced to a variety of genres centered around the theme of the conflict between the individual and society. Through careful study of authors' uses of language and genre, students will hone analytical skills as they address this theme and others that arise. Students will explore the nuances of writers' use of language across genres such as dystopian fiction, realism, persuasive nonfiction, epic poetry, and vignettes. Students will develop their own original interpretations, forming and supporting their own arguments. Authors studied may include Ray Bradbury, Sue Monk Kidd, Homer, Sandra Cisneros, Janet Wong, and William Shakespeare. We will also explore the themes relationships between self and society as we analyze works by contemporary poets Rupi Kaur, Joy Harjo, and Cleo Wade whose status as Instagram-famous poets adds an extra layer to our discussion of the individual in a broader societal context.

Tenth Grade English 1 Credit

This course continues the study of language and literature begun in the Ninth Grade English by building on their study of literature in a global context. Students read texts that are connected by topics such as culture, identity, and transformation, from a variety of genres and time periods. They are also exposed to different perspectives through their readings. Key texts are by authors such as Chimamanda Ngozi Adichie, Jhumpa Lahiri, Luka Lesson, Gene Luen Yang, and William Shakespeare. Key principles of written communication are reinforced and developed, with additional emphasis on organization and refinement of critical and analytical skills.

English 9/10 International 1 Credit

English 9/10 International is designed to meet the needs of ninth and tenth grade EAL students who are not yet mainstreamed in all their core academic classes, but who are working toward fluency and eventual integration into mainstream classes. The main focus of the course is the study of literature while meeting the needs of the non-native speaker of English. Texts studied are mostly unabridged and, amongst others, include authors such as Wiesel, Green, Bradbury, Haddon, and William Shakespeare for his sonnets. Students develop an increasing ability to read closely and critically and to respond actively to the literature by evaluating the works and formulating relevant questions and opinions. Students improve their academic writing skills through production of short essays and through personal writing in response to the works studied. Vocabulary development, oral and listening skills, as well as reading and writing skills are all emphasized.

Eleventh Grade English 1 Credit

This course utilizes key American texts in order to explore the features of American Literature and how those features have changed and evolved over time. Emphasis is placed on key writers representing the literary genres of autobiography, realism, bildungsroman, modernism, historical fiction, and non-fiction. American writers include Maya Angelou, F. Scott Fitzgerald, J.D. Salinger, Quon Barry, Sylvia Plath, and Jonathan Krakauer. A key component of the course is developing students' intellectual curiosity about literature. Students will develop an appreciation of writers' methods and the effect of those methods on the meaning of the text. This will involve close text analysis, comparative essays, and character analysis as well as poetry paired with select texts. To deepen their understanding of writers' methods, students use core texts as an inspiration for their own writing. The course also examines key issues in America today where the modern lens is paired with timeless texts.

English 11 International 1 Credit

International English classes are designed for the non-native speaker of English who is working towards fluency in the English language. This course aims to parallel regular Eleventh Grade English but in a "sheltered" way. The main focus of the course is the study of American literature. Students will develop an increased ability to read closely and critically, and to respond actively to the literature by evaluating the works and formulating questions and opinions about them. The course also encourages students to make connections between contemporary issues with classic texts. The students are expected to improve their language skills through the study and application of vocabulary and grammar, the practice of writing and speaking, and the improvement of reading comprehension. The students in this class range from EAL 2 to EAL 4.

Advanced Placement English Language and Composition 1 Credit

This course is designed to satisfy the needs of junior and senior students of superior ability who wish to take the College Board AP Examination in English Language and Composition. Students study the key writers and literary movements in American Literature. They explore in depth major concepts and themes associated with a nation's identity. They are grounded in the specific skills required for College Board examination, particularly through synthesis and rhetorical analysis essays. Students are expected to hone those communication skills that have been established in previous English courses: careful and active reading, principles of effective analysis, presentation techniques, and effective writing.

Enrollment requires a "B+" average in previous and current Honors English classes, teacher recommendation, and Department Head permission. If a student is coming from an International English course, it requires an "A" average and submission of writing sample to the Department Head for approval.

Twelfth Grade English 1 Credit

Grade 12 English focuses on British literature by authors such as Fowles, Shakespeare, Stevenson, Wilde, and Wodehouse. The course will challenge students to embark on a literary journey through critical interpretation of text and rigorous development of their writing skills in a variety of assessments that extend beyond the traditional essay. Students will also pursue collaborative and independent research using multiple resources. They will investigate the fundamental questions of the human quest for identity in a variety of texts, images and themes. Students are expected to demonstrate excellent skills in grammar, advanced vocabulary, and written and oral expression.

English 12 International 1 Credit

International English classes are designed for the non-native speaker of English who is working toward fluency in the English language. This course parallels regular Senior English while meeting the needs of non-native speakers of English. As the main focus of the course is the study of literature, students will develop their ability to read closely and critically, and to respond actively to the literature by evaluating the words and formulating relevant questions and opinions about them. The students are also expected to improve their language skills through the study and application of vocabulary and grammar, the practice of writing and oral skills, and the improvement of reading comprehension. The students in the class range in EAL 3.

Advanced Placement English Literature and Composition 1 Credit

This course is designed for junior and senior students of superior ability who wish to take the College Board AP Examination in English Literature and Composition. Students meticulously explore major concepts and themes from marginalized voices in society. They are grounded in the specific skills required for the College Board examination, particularly through writing short, analytical essays on poetry, prose, and drama. Strong emphasis is placed on careful and close reading. Students are expected to conduct research, compile assiduous notes, establish their own points of view, and explore the parallels between the literature and their own lives.

Enrollment requires a "B+" average in previous and current Honors English classes, teacher recommendation, and Department Head permission. If a student is coming from an International English course, it requires an "A" average and submission of writing sample to the Department Head for approval

English-As-An-Additional Language

The English-as-an-Additional Language Program at TASIS England is based on the philosophy that students have an immediate need to acquire specific academic English skills which will benefit them in their classes. This philosophy further assumes that a great deal of English is acquired through students' social interaction in the wider school community, and that the purpose of EAL classes is to foster correct usage of this, in both its spoken and written forms. The overall purpose of EAL classes, then, is to build and develop English skills for academic purposes, while at the same time encouraging students to monitor and improve their wider use of the target language.

Department requirement: Satisfactory completion of two consecutive years of EAL and reaching a level of EAL 3 or higher.

EAL 1 & EAL Support Class 1 Credit

This is a course designed for students who have studied some English for a minimum of one year and who have a grasp of the basic grammatical structures of the language. The aim of the course is to take these students quickly from a basic level of English competency to an intermediate level in one school year. To help accelerate their progress, students of EAL 1 benefit from the addition of an EAL Support Class, which meets four times every week and provides an opportunity for students to access EAL support with their other classes under the guidance of an Upper School EAL specialist. By the end of the course, students should be able to read unabridged texts in English, write clear, organized compositions of various types, and communicate effectively in the English language. All aspects of the language (reading comprehension, writing skills, listening comprehension, and oral communication) are stressed.

Prerequisite: Suitable score on the English placement test.

EAL 2 1 Credit

This is a course for students who have a good competency in English but who need to expand their vocabulary, increase their knowledge of the grammatical structures of the language, and perfect their writing and reading skills. The aim of the course is to take students from an intermediate level of competency to an advanced level. The overall objective of the course is to move students toward the proficiency needed to complete mainstream academic work in high school and university. **Students testing into EAL 2 will have international section classes in the core subjects of English, history, and science.**

Prerequisite: Successful completion of EAL 1 or a suitable score on the English placement test.

EAL 3 1 Credit

This course is for students of near-native fluency who need to perfect certain aspects of their English language. The course focuses on expanding vocabulary, increasing the range and scope of students' written expression, and exploring the more difficult areas of English grammar. It is assumed that basic skills have been acquired, and the focus will be on more complex structures, skills, and strategies. The overall objective of the course is to prepare students for mainstream academic work in high school and college. **Students testing into EAL 3 will have international section classes in the core subjects of English, history, and science.**

Prerequisite: Successful completion of EAL 2 or a suitable score on the English placement test.

EAL 4 Advanced Composition and Grammar 1 Credit

This course is designed for those non-native English-speaking students who have demonstrated a high level of proficiency in English but who still need guidance in developing their literacy skills. The primary emphasis is on written expression, as well as more complex structures, skills, and strategies used in academic reading and writing. The ultimate goal is to raise the students' level of composition skills to that required for success in American and British colleges and universities. **Students testing into EAL 4 will have mainstream section classes in the core subjects of English, history, and science.**

Prerequisite: Successful completion of EAL 3 or a suitable score on the English placement test.

Foreign Language

The TASIS England Foreign Language Department seeks to develop effective student language skills in the spoken and written language. Phonetically correct oral expression, accurate use of grammatical and idiomatic principles, and skills in analysis are encouraged. Classes are conducted in the target language, and instructional activities aim to encourage active communication and provide exposure to the culture, history, and literary heritage of the languages studied.

Department requirements: Two credits and attainment of TASIS third-level proficiency in a modern foreign language. If a student has completed two years' proficiency of Latin, a further two years of a modern language will satisfy this requirement. Students must satisfactorily complete at least two years of their foreign language requirement in Grades 9-12.

The common pathways for the study of foreign languages are set out below:

Up to 8th grade	**9th grade**	**10th grade**	**11th grade**	**12th grade**
MS Beginning or No language	Language Level 1	Language Level 2	Language Level 3	Language Level 4
MS Intermediate or Advanced	Language Level 2*	Language Level 3	Language Level 4	AP Level**
		OR →	IB Language B Yr1 SL/HL	IB Language B Yr2 SL/HL
MS Advanced	Language Level 3*	Language Level 4	AP Level**	
	OR →	IB Language B Yr 1 SL only	IB Language B Yr2 SL only (anticipated)	
			IB Language ab initio Yr1 SL***	IB Language ab initio Yr2 SL

* Based on teacher recommendation.

** Requires a "B" average in previous year and teacher approval.

*** Must not have studied the ab initio language prior to the start of the course.

MS Languages: French and Spanish

US Languages: French, Mandarin, and Spanish

IB Languages: French, German, and Spanish

Applicants to the IB Diploma Programme have additional entrance criteria.

French I 1 Credit

The French 1 course is a language learning course for beginners and is appropriate for students who have never studied French. All four skills of communication, reading, writing, speaking, and listening are taught concurrently. Topics of study include the French education system, leisure activities, the family, food, eating out, clothing, travel, sports, and seasonal activities. Developing a sound knowledge of basic grammar and an interest in French speaking people, their countries, and their cultures are essential components of this course. Cultural readings in the target language supplement material taught in each chapter. All classes are taught in French. Textbook: *Bien Dit 1*, Houghton Mifflin.

French II 1 Credit

The French II course allows the student to expand his or her knowledge of basic French. This course can be a step towards the TASIS graduation requirement of French III, and/or towards further study with a view to AP or IB French B in later years. French II develops the student's ability to communicate in everyday situations, such as talking about home, families and friends, school, sports, clothing, towns, travel, health, and preparing and eating food. All four language skills are developed simultaneously, and all classes are conducted in French. Cultural readings in the target language supplement material taught in each chapter. More complex grammar and contextualized vocabulary are introduced alongside the thematic topics in a comprehensive program that encourages meaningful, practical communication by immersing students in the language and culture of the Francophone world. Textbook: *Bien Dit 2*, Houghton Mifflin.

French III 1 Credit

The French III course introduces more advanced concepts in all four skill areas with increased emphasize on reading and writing skills. Knowledge of basic French and fulfils the departmental language requirement. This third-year course is designed to build upon the skills acquired by students in the second year. Level 3 allows the students to enlarge and refine their vocabulary and improve their ability to understand and respond to the spoken and written language. In addition, students are introduced to literary texts and continue to explore the culture of countries in which the languages are spoken. Students progress to French IV or IB French B Year 1 from this course. Textbook: *Bien Dit 3*, Houghton Mifflin.

French IV 1 Credit

This is an advanced course in which students continue their study of the more complex points of grammar and also begin to develop skills for reading literature. This course will enable students to develop a higher level of proficiency and to appreciate the rich cultural diversity of the Francophone world through the study of films, songs, and literature. The course is conducted entirely in the target language. Core themes explored are Identity, Experiences, Social Organization, Human Ingenuity, and Sharing the Planet. Skills in oral communication are developed through conversation, discussion, and in-class presentations, as well as radio and television broadcasts, articles, short stories, and a novel. Students have access to a wide range of authentic materials of different styles and registers. This course provides preparation for students who wish to continue their study of French by taking the AP French Language and Culture course. Textbooks: *Le Français dans le Monde,* Cambridge University Press; *Une Fois pour Toutes*, Pearson; *Monsieur Ibrahim et les Fleurs du Coran* (Schmitt), and materials drawn from a variety of other texts.

Open to students in Grades 10, 11, and 12 with the permission of the Head of the Modern Foreign Language Department. Students should maintain at least a "B" average in previous French Language courses.

Advanced Placement French Language and Culture 1 credit

Students who enroll in this course will possess a strong command of grammar and considerable competence in listening, reading, speaking, and writing. Students engage in an exploration of culture in both contemporary and historical contexts and develop their awareness and appreciation of cultural products (e.g., books, films and music), practices (patterns of interaction) and perspectives (values, attitudes). A variety of authentic texts will be used to allow students to respond confidently and convincingly to written and spoken materials and develop a true appreciation and awareness of Francophone peoples and cultures. The course is structured around six themes: Families in Different Societies, The Influence of Language and Culture on Identity, The Influences of Beauty and Art, How Science and Technology Affect our Lives, Factors that Impact the Quality of Life, and Environmental, Political & Societal Challenges. Students will learn to communicate in writing to a specific purpose and audience, using correct register and format for a persuasive essay and a formal email. Oral practice includes debates, presentations, and interactive activities, in preparation for a presentational oral assessment.

Textbooks: *Allons au Delà*, (Pearson); *Une Fois pour toutes (*Pearson); *Preparing for the French Language and Culture Exam* (Pearson); selected works of literature.

Spanish I 1 Credit

Spanish I is an introductory course which is intended for students with little or no prior experience in Spanish. All four language skills (reading, writing, listening, and speaking) are emphasized equally and developed simultaneously. Topics of study focus on practical everyday situations. Related to the topic of Identity, students will learn to describe physical and personality traits, explain how someone is feeling, identify family relationships, and talk about food and drink. Related to a theme of Experiences we discuss classes, the school day, hobbies, shopping, and domestic chores. Further topics covered range from the calendar and seasons to extending invitations to places around town. Developing a sound knowledge of basic grammar is an essential component of this course. A variety of readings, videos, and websites are used to supplement material taught in each chapter, and to promote an interest in the Ibero-Hispanic World. Textbook: *Realidades 1,* Prentice Hall.

Spanish II 1 Credit

The Spanish II course allows a student to expand his or her knowledge of basic Spanish. It can be a step toward the TASIS graduation requirement of Spanish III, or toward study with a view of taking AP or IB Spanish B in later years. This course requires the ability to communicate about everyday situations, such as doing chores at home, talking about family members, taking a trip, and preparing and eating food. All four language skills are developed simultaneously, and all classes are conducted in Spanish. Cultural readings in the target language supplement material taught in each chapter. More complex grammar and thematic, contextualized vocabulary are introduced alongside the above topics in a comprehensive program that encourages meaningful, and practical communication by immersing students in the language and culture of the Ibero-Hispanic world. Textbook: *Realidades 2*, Prentice Hall.

Spanish III 1 Credit

At the third level, more advanced grammar concepts are explored, and the study of the four skill areas continues with increased emphasis on advanced reading and writing skills. Students are also encouraged to improve their listening and speaking skills through informal class discussions, oral presentations, and language laboratory exercises. Perfecting a solid grasp of grammar and expanding one's knowledge of Spanish-speaking people as well as their cultures are requisite aims of this course. (Topics discussed include

holidays and leisure time, art and theater, food and health, relationships, community service, technology, and careers.) Discussions, readings, listening comprehension exercises, oral presentations, and independent research are integral components of this course. Literary extracts are introduced, as well as cultural topics involving personal research and oral presentations. This is the level at which a student should reach proficiency in the language required by TASIS for graduation. Textbook: *Realidades 3*, Prentice Hall.

Spanish IV 1 Credit

Students who enroll in this course should already have a fairly in-depth command of the language and possess considerable proficiency in listening, reading, speaking, and writing. A variety of authentic texts will be used to allow students to respond confidently and convincingly to written and spoken materials and develop a true appreciation and awareness of Hispanic peoples and cultures. This course continues to explore Hispanic culture using a thematic approach (Multicultural Spain, Health, Education, Family, Global issues, Environment, etc.) Students will learn to communicate to a specific purpose and audience, using correct register and format for a variety of text types such as letters, journals, articles, dialogues, speeches, etc. Materials used include songs, literary texts, and news articles, as well as debate activities, research, and oral presentations. Textbooks: *Español B* (Pearson); *Una vez más* (Pearson); *Cuadernos de gramática Española* (Difusión) and a reading book: *La lengua de las mariposas* (Wayside)

Advanced Placement Spanish Language and Culture 1 Credit

Students who enroll in this course will possess a strong command of grammar and considerable competence in listening, reading, speaking, and writing. The course takes a holistic approach to language proficiency and studies structures in context. Students engage in an exploration of culture in both contemporary and historical contexts and develop their awareness and appreciation of cultural products (eg. books, films, and music), practices (patterns of interaction) and perspectives (values, attitudes). A variety of authentic texts will be used to allow students to respond confidently and convincingly to written and spoken materials and develop a true appreciation and awareness of Hispanic peoples and cultures. The course is structured around six themes: Families in Different Societies, The Influence of Language and Culture on Identity, The Influences of Beauty and Art, How Science and Technology Affect our Lives, Factors that Impact the Quality of Life, and Environmental, Political & Societal Challenges. Students will learn to communicate to a specific purpose and audience, using correct register and format for a variety of texts such as emails, formal and informal letters, articles and persuasive essays. They will also participate in debates, guided dialogues, research projects, and oral presentations. Textbooks: *Preparing for the AP Spanish Language and Culture Exam* (Pearson); *Una vez más* (Pearson); *Abriendo paso* (OU).

Mandarin courses below can only be offered if there is sufficient student interest.

Mandarin I 1 Credit

A first-year course in elementary Mandarin, this course includes the study and practice of the basic skills of speaking, listening, reading, and writing with emphasis upon correct oral expression and aural comprehension. Students learn basic vocabulary words and sentence patterns. Students learn to understand and use the Mandarin phonetic system (pinyin), pronunciation, and tones. Students also learn to use the Chinese writing system (Chinese characters and computing typing). At the end of the year, students will have developed a beginner's vocabulary which includes numbers, name, age, nationality, family, time, date, daily routines, and colors so that they can communicate at a basic level in the language. Cultural topics may include the history of the Chinese language and traditional Chinese festivals. Textbook: *Easy Steps to Chinese 1* (Ma and Li).

Mandarin II 1 Credit

This course is a continuation course designed for students who already have the basics of Chinese learned either through taking Chinese I or through some other relevant experience. Building on the skills acquired in Chinese I, this course will help students improve their vocabulary, as well as enhance their listening, speaking, reading, and writing ability. This course introduces students to more complex sentence structures which students will learn to use comfortably in talking about school subjects, weather, hobbies, food, and drink. Additionally, the course will continue to integrate aspects of Chinese culture into the language learning experience. The class is conducted in Mandarin to the greatest degree possible to develop aural-oral competency. Textbook: *Easy Steps to Chinese 2* (Ma and Li).

Mandarin III 1 Credit

This course is designed for students who have completed Chinese II or an equivalent course. This third-year course will help students to build vocabulary, improve speaking, comprehend complex topics, and encourage extensive conversation related to school life and everyday situations. Reading comprehension and writing skills will be emphasized in this course, and essay writing becomes an integral part of the course in preparation for more advanced study. Alongside the language acquisition components of this course, students will also have an introduction to various aspects of Chinese culture with a view to comparing that culture with the students' home culture. Textbook: *Easy Steps to Chinese 3* (Ma and Li).

Mandarin IV 1 Credit

This course is for students who have completed the requirements for Mandarin 3. The course focuses on students' communication skills through dialogues and texts about different topics in everyday life, such as appearance, occupations, personality, daily routine, domestic chores, pets, school, examinations, school events, cuisine, festivals, eating out, neighborhood, travel, and accidents. Students also learn to write paragraphs in Chinese sentence patterns with correct grammar and vocabulary. Through cultural comparisons and contrasts, students explore Chinese culture. Textbook: *Easy Steps to Chinese 4* (Ma and Li).

Advanced Placement Chinese Language and Culture (Mandarin) 1 Credit

AP Chinese Language and Culture is equivalent to an intermediate-level university course in Chinese. Students cultivate their understanding of the Chinese language and culture by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Chinese Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Chinese. The AP Chinese Language and Culture course is designed to be comparable to fourth semester (or the equivalent) college/university courses in Mandarin Chinese. Textbooks: *Harvest Intermediate Chinese 2nd Ed.* (Xu, Chen, Wang, Zhu); Barron's *Guide to AP Chinese Language and Culture; College Board AP Chinese Online Classroom.*

History and Social Sciences

The TASIS England History Department bases its curriculum on three beliefs central to college preparatory education. First, students need an understanding of Ancient and Medieval history, of Western civilization, of American history, and of current issues. Second, students must learn to address critically and analytically different types of historical and contemporary sources in order to draw their own conclusions about the world in which they live. Finally, once they have acquired the background knowledge and appropriate skills, students should be offered further courses in history and in social studies disciplines.

Department requirement: 3 credits

Ancient and Medieval World 1 Credit

This course is a survey of world history from the time of the Neolithic Revolution through to the Renaissance. Students learn to identify and organize geographic, economic, political, religious, and technological developments to support logical explanations for historical change. Vital to success in this class and beyond is the development of the fundamental skills of organization, building content knowledge, and comprehension. In addition, new critical historical reasoning skills such as analysis and argumentation will be practiced. Students will develop these skills through in-class activities, note-taking, persuasive writing, analysis of historical sources, and independent research. Various primary and secondary sources are utilized for reading and class discussions.

Required for students in Grade 9.

World History 1 Credit

This course investigates the social, economic, political, religious, and philosophical developments in Europe from the Early Modern Era through the Modern Era and analyses the impact this had throughout the world. Students concentrate on the emergence of modern ideas and their relationship to history. Vital to success in this class and beyond is the development and acquisition of new critical historical reasoning skills such as argumentation, contextualization, change and continuity over time, and interpretation of historical evidence. Students will develop these skills through in-class activities, analysis of historical sources, and independent research, as well as both written and oral argumentation.

Required for students in Grade 10.

World History International 1 Credit

The periods covered by this course are generally the same as those of the Grade 9 and 10 courses for native speakers. A two-year course, World History International includes Ancient and Medieval Western History in the first year and Modern European History in the second. Attention is given to the development of a vocabulary appropriate to historical study. Writing skills are encouraged through short classroom exercises and longer homework assignments. As the course progresses, increased emphasis is given to the development of formal essay-writing skills. Textbook: *Modern World History,* Ben Walsh.

Open to students in EAL levels 1-3.

United States History 1 Credit

A thematic study of United States History, this course focuses on an exploration of major social, political, economic, and cultural themes (such as Democracy, Progress, Freedom, Citizenship) in an attempt to better

understand what it means to be "American." The course seeks to link the study of the past to an understanding of the contemporary United States through the continued development of critical historical reasoning skills such as contextualization, causation, comparison, and change and continuity over time. Particular attention is given to the practical skills such as the analysis of historical sources, research, and both written and oral argumentation. Textbooks: *Give Me Liberty!*, Foner; *Global Americans, A History of the United States*, Montoya, et al.

Required for non-IB diploma students in Grade 11.

United States History International 1 Credit

This year-long course is designed to give international students a comprehensive introduction to the major political, social, and economic themes of US history. The course begins with Industrialization and ends with Modern America. Drawing on primary sources, students develop both content knowledge and critical interpretation skills. They explore important tensions that have arisen at various times - between freedom and government, development and exploitation, and diversity and tolerance, to name a few. Attention is given to the development of reading fluency, listening comprehension, and oral and written communication. Writing skills are encouraged through the analysis of proper sentence and paragraph structures. As the course progresses, increased emphasis is given to the development of research and formal presentation, and essay-writing skills. Textbook: *TCi History Alive!*

Open to students in EAL levels 2-4.

Advanced Placement European History 1 Credit

This course is designed to satisfy the needs of students with superior organization, work ethic, and ability who wish to take the College Board AP Examination in European History. This course is designed to help students develop an understanding of some of the principal themes in modern European history, an ability to analyze historical evidence, and an ability to express historical understanding in writing. Students are expected to demonstrate a high level of organization and time management, as well as knowledge of basic chronology and of major events and trends from approximately 1450 to 2001, from the Renaissance to the recent past. Students will be called upon to interrelate themes and to trace developments of themes through four chronological periods. These themes include intellectual and cultural history, political and diplomatic history, and social and economic history. Textbook: *Western Civilization, 9th Edition*, Spielvogel.

Open to students in Grades 10, 11, and 12. Enrollment requires an "A-" average in current and previous history courses, teacher recommendation, and Department Head permission.

Advanced Placement United States History 1 Credit

This course is designed to satisfy the needs of students of superior ability who wish to take the College Board AP Examination in United States History. This course is designed to lead students to a deeper understanding of the political, economic, and social factors which have shaped the United States. In addition to a text, students study historical documents and the research and views of selected historians. Students are encouraged to develop their ability to analyze, research, and debate. Particular attention is paid to the refinement of writing skills in preparation for the AP US History exam in May. Textbook: *America: A Narrative History,* Tindall, Shi.

Open to students in Grades 11 and 12 as an alternative to US History. Enrollment requires a "B+" average in current and previous History courses, teacher recommendation, and Department Head permission.

International Issues .5 or 1 Credit

International Issues is a modern social science, which is primarily considered as the study of the relations among states. It is an interdisciplinary academic subject that is comprised of history, government, political theory, economics, and law. The purpose of this course is to introduce students to the concepts and theories of international relations, then to use these skills and tools to analyze modern issues facing political leaders and societies. Throughout the course, contemporary issues of international interest or concern will be pursued through books, newspapers, journals, periodicals, and electronic media. Students can take the course for one semester or both since the topics of study will be different in the two semesters.

Advanced Placement Economics 1 Credit

This course is designed to satisfy the needs of junior and/or senior students of superior ability who wish to take the College Board AP Examinations in Microeconomics and Macroeconomics. This course is comprised of three components: basic economic concepts, microeconomics, and macroeconomics. Microeconomics focuses on principles of economics that apply to the functions of individual decision-makers, both consumers and producers, within the larger economic system. Macroeconomics addresses principles that apply to the economic system as a whole. Textbook: *Krugman's Economics for AP.*

Open to students in Grades 11 and 12 who have completed Algebra I, Algebra II, and Geometry. Enrollment requires a "B+" average in current and previous History courses, teacher recommendation, and Department Head permission.

Advanced Placement Human Geography 1 Credit

This course is designed to satisfy the needs of junior and/or senior students of superior ability who wish to take the College Board AP Examination in Human Geography. This is a challenging, two-semester course designed to offer an in-depth, problem-solving approach to understanding the patterns and processes of human interaction on the planet. Solid analytical and communication skills, along with a willingness to devote considerable time, are necessary to succeed. Emphasis is placed on critical and evaluative thinking skills, outcomes-based problem-solving, collaboration, and the creation, interpretation and use of maps and spatial or demographic data.

This course is organized according to the objectives and subtopics outlined in the AP Human Geography Course Description under the following categories:

1. Geography: Its Nature and Perspectives
2. Population and Migration
3. Cultural Patterns and Processes
4. Political Organization of Space
5. Agriculture and Rural Land Use
6. Industrialization and Economic Development
7. Cities and Urban Land Use

Text: *The Cultural Landscape: An Introduction to Human Geography, 13th Edition, Rubenstein*

Open to students in Grades 11 and 12. Enrollment requires a "B+" average in current and previous History courses, teacher recommendation and Department Head permission.

Advanced Placement Psychology 1 Credit

This course is designed to satisfy the needs primarily of junior and/or senior students of superior ability who wish to take the College Board AP Examination in Psychology. The course is designed to provide a broad overview of psychology and its various approaches and subfields. The course begins with a brief examination of the history of the subject, then swiftly moves on to discussions of research methods and ethics. Subsequently, students will examine various major branches within psychology including Behavioral, Biological, Cognitive, Developmental, and Socio-Cultural Psychology. The course concludes with an examination of the field of Abnormal Psychology, in which students learn about various psychological disorders and their treatments. Textbook: *Myer's Psychology for the AP*, Myer et al.

Open to students in Grade 10 who have a A- or higher in a previous history course, and students in Grades 11 and 12 who have a "B+" average in current and previous Hhstory courses. Enrollment requires a teacher recommendation and Department Head permission..

Advanced Placement United States Government * 1 Credit

This course is designed to satisfy the needs of junior and/or senior students of superior ability who wish to take the College Board AP Examination in United States Government. This year-long elective is designed to give students a sound understanding of government and politics in the context of the political system of the United States. American politics will be compared to other systems, such as the United Kingdom. Students will develop their analytical and interpretive skills as they draw on a wide array of sources and examine specific political phenomena through various perspectives. Topics include: the constitutional foundation of government; political beliefs and behaviors; relationships and interactions among the institutions of government; enactment and implementation of policy in various areas; and the judicial interpretation of civil rights and liberties. Textbook: *American Government: Stories of a Nation,* Waples.

Open to students in Grades 11 and 12. Enrollment requires a "B+" average in current and previous History courses, teacher recommendation, and Department Head permission.

Advanced Placement Comparative Government * 1 Credit

This course is designed to satisfy the needs of junior and/or senior students of superior ability who wish to take the College Board AP Examination in Comparative Government. This year-long elective is designed to introduce students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures, policies, and political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues. Textbook: TBA

Open to students in Grades 11 and 12. Enrollment requires a "B+" average in current and previous History courses, teacher recommendation, and Department Head permission.

*** Note**: The AP US Government and AP Comparative Government courses will be offered in alternate years. AP US Government coincides with United States election years.
AP Comparative Government will be offered 2023-24
AP United States Government will be offered 2024-25

Humanities

The Department believes that the teaching of values is an essential part of the education of each TASIS England student. The Senior Humanities and IB Theory of Knowledge (ToK) courses cover the central themes of both culture and values as a way of exploring the highest achievements of civilization. These core values are discussed and explored through a variety of subject areas, including art, literature, and philosophy. Students participate in appropriate Humanities course-related field trips during the school year.

Department requirement: 1 credit (in Grade 12) of Senior Humanities or Advanced Placement Art History (see course description in the Arts section) or satisfactory completion of the two-year IB Theory of Knowledge course in Grades 11 and 12 (for IB Diploma Program candidates only).

Senior Humanities 1 Credit

The Senior Humanities Program provides TASIS Seniors with a signature educational experience. Students enhance their intellectual exploration of the Humanities through discussions, trips, project-based learning, and lectures. Senior Humanities encourages students to approach the big questions of human experience with a sense of open-mindedness and curiosity. Over the course of this pivotal academic year, we visit four key areas of inquiry: Truth (Logic), Beauty (Aesthetics), The Sacred (Ethics), and Civilization (The Revolutionary). By examining texts from classical thinkers, and submerging their ideas in contemporary debates and contexts, students will engage questions that inspired great minds throughout history: how does language hide or reveal the truth? Are there limits to what we can know? How should we organize society? What makes life meaningful? How do cultural values differ or agree? In what way have civilizations in the past found meaning through shared concepts? As leaders, how do we justify the decisions we make using ethical, community-focused frameworks?

Theory of Knowledge 1 Credit

The Theory of Knowledge (TOK) course provides students with an opportunity to explore and reflect on the nature of knowledge and the process of knowing. It is a core element of the IB Diploma Programme to which schools are required to devote at least 100 hours of class time over Grades 11 and 12.

In TOK, students reflect on the knowledge, beliefs, and opinions that they have built up from their years of academic studies and their lives outside the classroom. The course is intended to be challenging and thought-provoking – as well as empowering – for students.

Mathematics

This department believes that the study of Mathematics is vitally important to secondary education for its utility and for its philosophic nature. An objective of the TASIS England mathematics curriculum is the preparation of students for college entrance and higher studies, both in Mathematics and in other related areas. Apart from such practical considerations, however, this department believes in the additional value of Mathematics as a branch of philosophy, as a disciplined mode of thought. Mathematics fosters an appreciation for the study of knowledge for its own sake. Among the sciences, Mathematics particularly trains the mind in powers of critical analysis, sequential thought, organization, and the practice of rigorous logic in pursuit of sound and defensible conclusions.

Department requirement: 3 credits (through Algebra II)

The common pathways for the study of mathematics are set out below:

9th grade	10th grade	11th grade	12th grade
Algebra I	Geometry	Algebra II	Statistics or Precalculus
	OR →	IB Math Apps Yr1 SL	IB Math Apps Yr2 SL
Geometry	Algebra II	Statistics or Precalculus	AP Calculus AB**
	OR →	IB Math Analysis Yr1 SL	IB Math Analysis Yr2 SL
Algebra II	Statistics or Precalculus	AP Calculus AB** or AP Statistics**	AP Calculus BC**
	OR →	IB Math Analysis Yr1 SL or HL	IB Math Analysis Yr2 SL or HL
Advanced Algebra II*	Advanced Precalculus**	AP Calculus BC**	Linear Algebra**
	OR →	IB Math Analysis Yr1 HL	IB Math Analysis Yr2 HL

* Based on teacher recommendation.
** Requires a "B" average in previous year and teacher approval.

Additional Mathematics and Computing courses:

- AP Statistics
- Advanced Programming
- AP Computer Science A
- AP Computer Science Principles

Applicants to the IB Diploma Programme have additional entrance criteria.

Algebra I 1 Credit

This course introduces and derives the underlying properties of algebra and the number system. Emphasis is placed on the basic skills of algebra including one-variable equations, linear equations, systems of linear equations, and the graphing of linear functions. The course also introduces second-degree equations and functions, factoring, and solutions of quadratic equations. Textbook: *Algebra I,* Holt-McDougal.

Geometry 1 Credit

This course provides a thorough foundation in plane Euclidean geometry, with emphasis on the formal nature of definition, the structure of knowledge, and inductive and deductive reasoning. An introduction to trigonometry through similar triangles and to analytic geometry through the co-ordinate plane is included. Topics include logic and proof, parallel lines and polygons, perimeter and area, volume and surface area analysis, similarity and congruence. Textbook: *Geometry,* Houghton Mifflin Harcourt.

Prerequisite: Algebra I

Algebra II 1 Credit

This course is an in-depth study of algebra, including solutions of quadratic equations, irrational and complex numbers, inequalities and word problems, exponential and logarithmic functions, graphing of conics, fundamentals of trigonometry, study of sequences, and binomial expansions. Textbook: *Algebra & Trig,* Ron Larson, (10th Edition). *A TI-84+ calculator is required for this course.*

Prerequisite: Algebra I

Advanced Algebra II 1 Credit

This course is an accelerated and advanced study of algebra suitable for ninth or tenth grade students who have maintained a grade of at least 95% in Geometry. This course will cover similar topics to Algebra II (see above) but will go into more depth and will seek to enable students to develop a deep understanding of the concepts covered. Textbook: *Algebra & Trig,* Ron Larson, (10th Edition). *A TI-84+ calculator is required for this course.*

Prerequisite: Geometry with a grade of at least 95%. Enrollment is with the permission of the Head of Mathematics.

Precalculus 1 Credit

Precalculus is a full-year advanced mathematics course designed to prepare students for the study of calculus at the high school or college level. It also serves as the prerequisite for IB Mathematics HL. The course begins with an in-depth study of polynomial, rational, exponential and logarithmic functions with an emphasis on graphing as well as algebraic methods of solving them. This is followed by a complete study of trigonometry. Other topics covered include: Sequences and Series, the Binomial Theorem, Permutations and Combinations, and Systems of Equations and Inequalities. Textbook: *Precalculus,* Houghton Mifflin. *A TI-84+ calculator is required for this course.*

Prerequisites: Geometry and Algebra II. Enrollment is with the permission of the Head of Mathematics and on the basis of a placement test.

Statistics 1 Credit

This course provides students with an introduction to important topics in statistics and probability by focusing on the statistical thinking behind data collection and analysis. It helps students be more discerning consumers of statistics, teaching them to interpret the numbers in surveys, election polls, and medical studies. This activity-based course will include topics such as sampling, surveys, experimental design, organizing data, distributions, probability, and inference. This course will be ideal for students who may struggle or not be confident with algebra-based courses but still want to continue their pursuit of mathematical study and build vital skills that will help them succeed at university and beyond. Textbook: *Statistics and Probability with Applications,* Starnes, Tabor, Wilcox (4th Edition). *A TI-84+ calculator is required for this course.*

Prerequisites: Algebra II. Open to students in Grades 9 through 12.

Advanced Precalculus 1 Credit

Advanced Precalculus is designed for students who have earned at least an A- or above in Advanced Algebra II. This is a full-year advanced mathematics course that will, in the First Semester cover a wide range of algebra and trigonometry before introducing students to the fundamentals of differential and integral calculus in the Second Semester. By the end of this course, students will be eligible to either enroll in AP Calculus AB or AP Calculus BC. Textbook: *Precalculus,* Houghton Mifflin. *ATI-84+ calculator is required for this course.*

Prerequisites: Advanced Algebra II with an "A-" or above. Enrollment is with the permission of the Head of Mathematics.

Advanced Placement Statistics 1 Credit

This is a full-year, introductory, non-calculus based, college-level course in statistics. The course meets the requirements for introductory statistics courses in fields such as psychology, sociology, and health sciences, and it prepares students for higher level calculus-based statistics courses in fields such as engineering, business, and mathematics. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. The course prepares students for the Advanced Placement Examination in May. *A TI-84+ calculator is required for this course.* Textbook: *The Practice of Statistics,* Starnes Tabor (6th Edition)

Prerequisites: Algebra II

Students wishing to enroll in this Advanced Placement course should maintain at least a "B+" average in all their previous and current mathematics courses of study.

Advanced Placement Mathematics, Calculus AB 1 Credit

This is a full-year course for those students who have successfully completed a full-year Precalculus course with at least an "A-" average. The course includes a study of limits, and differential and integral calculus of elementary functions and their applications. This course prepares students for the Advanced Placement Calculus AB Examination in May. Textbook: Calculus: *Early Transcendentals, International Edition,* James Stewart (2012 edition). *A TI-84+calculator is required for this course.*

Enrollment is with the permission of the Head of Mathematics.

Students wishing to enroll in this Advanced Placement course should maintain at least an "A-" average in all their previous and current mathematics courses of study.

Advanced Placement Mathematics, Calculus BC 1 Credit

This is a full-year course for those students who have successfully completed the Calculus AB course. The course includes all the topics from the Calculus AB course and the following AP Calculus BC topics: derivatives and application of derivatives of vector functions and parametrically defined functions; integration by trigonometric substitution and by partial fractions; improper integrals; area bounded by polar curves; length of a path; and work. The course also includes an in-depth study of convergence and divergence of sequences and series, including power series and Taylor series with Lagrange error approximation. Additionally, the students' study of single variable calculus will be extended to multivariate and vector-valued functions; consequently, the scope and content of the course significantly exceeds that of the AP Calculus AB content. This course prepares students for the Advanced Placement Calculus BC Examination in May. Textbook: *Calculus: Early Transcendentals, International Edition* James Stewart (2012 edition). *A TI-84+ series calculator is required for this course.*

Enrollment is with the permission of the Head of Mathematics.

Students wishing to enroll in this Advanced Placement course should maintain at least a "B" average in all of their previous and current mathematics courses of study.

Linear Algebra and Multivariable Calculus 1 Credit

This is a full-year course for students who have completed AP Calculus BC and will serve as an excellent primer in a range of advanced topics appropriate for students wishing to pursue mathematics or engineering at university. The course will include all topics covered in both AP Calculus AB and AB Calculus BC and will cover a wide range of new, advanced topics including: Matrices, Vector Spaces, Orthogonality, Determinants, Eigenvalues and Eigenvectors, Linear Programming, Game Theory, Partial Derivatives, Multiple Integrals, and Vector Calculus. Textbooks: *Linear Algebra and its Applications*, Gilbert Strang (4th Edition); *Calculus – Early Transcendentals*, James Stewart (7th Edition). *A TI-84 calculator is required for this course.*

Enrollment is with the permission of the Head of Mathematics. Students who wish to take this course concurrently with AP Calculus BC must have passed the AP Calculus AB exam with a 5.

Physical Education

The aim of PE is to provide all students with an opportunity to learn within a balanced program in which they are encouraged to further develop their application and understanding of movement skills, sportsmanship, collaboration/teamwork, and sports leadership.

Students will cover five main units throughout the year. Within each unit we will look at integrating health topics through the concepts of:

- *Net Games;*
- *Invasion Games;*
- *Personal Fitness;*
- *Striking and Fielding; and*
- *Movement Concepts (Parkour/Dance).*

Students will be given the opportunity throughout the various units to nurture their curiosity and discover and learn about the key concepts that aim to build upon previous knowledge and skills. Each of these skills are transferable into other PE units and also classroom-based subjects. They also help each student to strengthen not only their own individual experiences, but to encourage students to identify the positive connections that arise from shared and/or group experiences. An example of this is how communication can affect individual and team success.

Students will be emboldened to undertake a variety of learning/teaching roles within lessons, providing opportunities to gain further knowledge and/or to develop skills in areas such as peer coaching, refereeing, lesson review, and reflection. These additional learning experiences allow students to play their part within a positive learning environment. This will provide each student with the opportunity to develop as a principled, open minded, and compassionate member of our community. Students are given the best possible chance to flourish within PE when they are encouraged to take risks, learn from mistakes, and ultimately develop a life-long passion for physical activity and a healthy lifestyle.

Department requirement: 1 Credit

Physical Education: (required course for Grades 9 and 10) .5 Credits each year

Science

The Science Department offers an integrated program of courses in the physical, biological, and environmental sciences designed to equip students with a level of scientific literacy appropriate to the modern world. Students are encouraged to develop an awareness of the nature of the scientific process, to seek knowledge and understanding in a wide range of scientific subjects, to learn analytical and practical skills required for scientific discovery, and to nurture their enthusiasm and respect for the natural world. It is intended that TASIS England graduates will be inspired to continue learning about science throughout their lives.

Department requirement: 3 credits in high school laboratory sciences. Students need approval from the Head of Science to take more than one AP or IB Higher Level science course in a year. Students taking IB Higher Level courses are required to contribute additional independent laboratory time.

The common pathways for the study of science are set out below:
A course will only run if there are sufficient number of students choosing a course.

<table>
<tr><th>9th grade</th><th>10th grade</th><th>11th grade</th><th>12th grade</th></tr>
<tr><td>1 Science from Biology, or Chemistry, or Physics</td><td>1 or 2 Sciences not taken in 9th Grade: Biology, or Chemistry, or Physics</td><td>1 or 2 AP Sciences, or Environmental Science, or Science not taken in 9th or 10th grade</td><td>1 or 2 AP Sciences, or Environmental Science</td></tr>
<tr><td></td><td></td><td colspan="2">1 IB or 2 IB Sciences taken at SL or HL for 2 years</td></tr>
<tr><td></td><td>AP Physics 1</td><td>AP Physics 2 and/or AP Physics C</td><td>Research Physics* or AP Physics C</td></tr>
<tr><td>Science International**</td><td>Biology International**</td><td rowspan="3" colspan="2"><table><tr><td>1 or 2 AP Sciences, or Environmental Science, or Science not taken in 9th or 10th grade</td><td>1 or 2 AP Sciences, or Environmental Science</td></tr><tr><td colspan="2">1 IB or 2 IB Sciences taken at SL or HL for 2 years</td></tr></table></td></tr>
<tr><td>Biology International**</td><td>1 Science from Biology, or Chemistry, or Physics</td></tr>
</table>

* Offered to students who have completed all Physics courses who are in senior year
** Students who have EAL prerequisites

Science International 1 Credit

Science International is a rigorous course in integrated laboratory science, with a strong emphasis on linguistic development, for students in the EAL program. The course focuses on chemistry and physics, and introduces elements of life, earth, and environmental science. It explores the connections between these sciences and features the work of scientists from around the world. It includes references to current events with scientific relevance and draws on examples of historical and modern scientific projects and explorations. The students are trained in laboratory and field work, and in the science reporting process, including experimental design,

and the collection, analysis, and interpretation of data. The aim of the course is to prepare international students both scientifically and linguistically for future classes in mainstream science. Textbook: Physical Science Concepts in Action with Earth and Space Science, Pearson

Recommended for students in EAL 1, and open to students at any level of EAL1-3.

Biology International 1 Credit

This is a laboratory course based on the investigation of properties common to all living organisms through experimentation and classroom instruction. Special emphasis is placed on developing appropriate vocabulary and descriptive skills. Topics include molecular and cellular biology, respiration and photosynthesis, a survey of the kingdoms, microbiology, genetics, evolution, and a detailed study of vertebrate systems with special reference to the human body. Students are introduced to ecology: the relationships of organisms to their habitats, and the human impact on the environment. Textbook: HMH Science Dimensions: *Biology*

Open to EAL students at levels 2-3 and any student who has taken the Science International course previously but is not linguistically able to access mainstream science courses.

Biology 1 Credit

This is a laboratory course based on the investigation of properties common to all living organisms through experimentation and classroom instruction. Topics include molecular and cellular biology, respiration and photosynthesis, a survey of the kingdoms, microbiology, genetics, evolution, and a detailed study of vertebrate systems with special reference to the human body. Students are introduced to ecology: the relationships of organisms to their habitats and the human impact on the environment. Textbook: *Biozone NGSS edition*

Recommended for students in Grade 9, 10, and 11 who have not completed an upper school biological science and who have good English proficiency.

Advanced Placement Biology 1 Credit

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes–energy and communication, genetics, information transfer, ecology, and interactions. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices, an example being "Are Slime Molds Intelligent?" There is an emphasis on experimental design, data analysis and evaluation, and the application of science practices and principles to unfamiliar real-world examples and scenarios

Students will work with up-to-date research papers to develop their "claim, evidence, and reasoning skills" which are essential for the exam. These skills can be applied to any unfamiliar material and allow the students to show their understanding and application of biological content and concepts. To further enhance these skills systems, modeling and computational simulations are used regularly. Wider reading is achieved through the summer reading packet in which there is a choice of very accessible texts such as "The Inner Fish" and "Survival of the Sickest." It is a dynamic and engaging course where students have the opportunity to direct, lead, and collaborate. When possible, Unit 8 Ecology is delivered at a Field Studies Center.

Prerequisities: One year of a Biological or Environmental Science for which at least a "B+" average has been achieved, or an AP Biology diagnostic test (achieving at least 85%) and an interview with Head of Department and Academic Dean, or completion of an Advanced Biology course.

Chemistry 1 Credit

This course lays the foundation for the principles and processes of chemistry and provides a detailed study of the nature and behavior of matter by combining theoretical understanding with practical experimentation. The nature of scientific inquiry is demonstrated in required readings, and practiced by students in the laboratory, and an emphasis is placed on data interpretation and analysis. Topics covered include atomic structure and chemical bonding, chemical composition, reactions and mass relationships, the kinetic theory of gases, periodicity of the elements, and the chemistry of acids and bases. Throughout the course, students develop their analytical and critical thinking skills, as well as manipulative skills in the laboratory. Textbook: Pearson *Chemistry*

Recommended for students in Grades 9, 10, and 11 who have not completed an upper school chemistry course, and who have taken Algebra 1 or are concurrently studying Algebra 1.

Advanced Placement Chemistry 1 Credit

AP Chemistry couples a fast-faced review of concepts previously learned with the study of new, in-depth material and advanced laboratory work. Students spend the first few months of the course reviewing stoichiometry, atomic theory and periodicity, bonding, energetics, kinetics and acid base theory learned previously. Each of these reviews exposes students to greater conceptual detail and help them accumulate the scientific background for the big ideas that AP syllabus is grouped in. The big ideas are Scale, Proportion and Quantity, Structure and Properties, Transformations and Energy. Under each big idea students study different concepts and learn to apply these principles to explain different scientific processes. AP Chemistry students conduct numerous laboratory investigations including guided inquiry labs where they use critical thinking in reaching the results. During practical work students are expected to fully comply with the safety expectations and be aware of environmental impact of the chemicals used. Textbook: Zumdahl, AP Edition Chemistry and Cracking the AP chemistry Exam: The Princeton Review.

Recommended for students who have taken or are concurrently studying Algebra II.

Prerequisites: One year of Chemistry for which at least a "B+" average has been achieved, or IB Chemistry Year 1 for which at least a "5" has been achieved, or an AP Chemistry diagnostic test (achieving at least 85%) and an interview with Head of Department and Academic Dean.

Physics 1 Credit

Physics is an introduction to physics that includes motion and kinematics, forces and dynamics, energy and momentum, electromagnetism, oscillations, and circuits. The treatment is mostly one-dimensional roughly following a historical timeline that conveys ideas first espoused by the likes of Galileo, Newton, Joule, Watt, and Faraday. Students will explore and confirm the physical laws themselves through laboratory explorations. Textbook: *Conceptual Physics*, Paul Hewitt, and similar texts

Recommended for students in Grades 9, 10, and 11 who have not completed an Upper School physics course, and who have taken Algebra I or are concurrently studying Algebra I and/or Geometry.

Advanced Placement Physics 1 (Algebra-Based) 1 Credit

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics including Newtonian mechanics, with rotational motion and angular momentum; work, energy, and power; simple harmonic motion and mechanical waves and sound; electrostatics and simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. Laboratory investigations will foster student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments, and solving problems in a collaborative setting. Students will also be prepared to take the AP Physics C Mechanics exam if they desire. This course is approved by AP College Board. Textbook: *College Physics*, OpenStax; *Fast Track to A 5. Preparing for the AP Physics 1 and AP Physics 2* by Joe Mancino and Vaughn C. Vic.

Prerequisite: Geometry and Algebra I or higher math with grades of "B+" or higher, concurrent enrollment in Algebra II or higher, and departmental permission.

Advanced Placement Physics 2 (Algebra Based) 1 Credit

AP Physics 2 is equivalent to a second-semester college-level course in algebra-based physics, and covers fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. The focus of this course, as with AP Physics 1, will be on developing and using physics knowledge by applying it to the practice of scientific inquiry and reasoning. Laboratory investigations will foster student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments, and solving problems in a collaborative setting. The course may also be taken in conjunction with, or before or after, AP Physics C. Textbook: *College Physics*, OpenStax

Prerequisite: Algebra 2 with a grade of B+ or concurrently enrolled in Advanced Precalculus or higher math, AP Physics 1 or AP Physics C Mechanics with grade of "B+" or higher, and departmental permission.

Advanced Placement Physics C Mechanics 1 Credit

AP Physics C Mechanics is a year-long calculus-based physics course that is equivalent to a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Textbook: *Physics for Scientists & Engineers with Modern Physics, 4 ed.* (Pearson International Paperback Edition - 29 Jul 2013) by Doug Giancoli.

Prerequisite: Geometry and Algebra II or higher math with grades of "A-" or higher, concurrent enrollment in Advanced Pre-calculus, or higher, and departmental permission.

Advanced Placement Physics C Electricity & Magnetism 1 Credit

AP Physics C Electricity and Magnetism is a year-long calculus-based physics equivalent to a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as electrostatic conductors, capacitors, and dielectrics; electric circuits; magnetic fields; electromagnetism; inductors; and introduces Maxwell's equation in integral form. Introductory differential and integral calculus is used throughout the course. Textbook: *Physics for Scientists & Engineers with Modern Physics, 4 ed.* (Pearson International Paperback Edition – 29 Jul 2013) by Doug Giancoli**.**

Prerequisite: AP Physics 1 or AP Physics C Mechanics, concurrent enrollment in AP Calculus AB or BC, an "A-" or higher in prior math, and departmental permission.

Environmental Science 1 Credit

This laboratory course studies the living and non-living characteristics of our environment and the impact that humans have on the environment. Major topics include ecology, land and resource use, energy, human populations, pollution, policy, and ethics. Discussions of current environmental events are central to the course, and alternatives for the future are explored. Textbook: *BIOZONE Environmental Science*.

Prerequisites: Two years of high school laboratory science, including a biological and a physical science. International Section students should have adequate English language skills to cope with the extensive reading and writing in the course.

Advanced Placement Environmental Science 1 Credit

This course seeks to meet the objectives of a first-year college course in environmental science. The course studies the living and non-living characteristics of our environment, and the impact that humans have on the environment. Major topics include ecology, land and resource use, energy, human populations, pollution, policy, and ethics. Discussions of current environmental events are central to the course and alternatives for the future are explored. Extensive laboratory investigations and reports are included. This course leads to the Advanced Placement Environmental Science Examination in May. Textbook: *Environmental Science,* Cunningham.

Prerequisite: Algebra I and two years of high school laboratory science, including a biological and a physical science. Students wishing to enroll in AP courses should maintain at least a "B+" average in all of their previous and current relevant courses of study. Students must have strong English language skills to cope with the demanding reading and writing in the course, and obtain departmental permission.

International Baccalaureate Courses

The differentiation between HL and SL may refer to content as well as assessment components and/or criteria.

All course descriptions are based on the corresponding Subject Guides published by the International Baccalaureate. Please note that while we aim to offer all courses described below, these are subject to student enrollment numbers.

Group 1: Studies in Language and Literature

To fulfill the requirements of the IB Diploma Programme, all students must study at least one Group 1 subject, namely a language in which the student has "first-language" or near "first-language" competency. Students taking two Group 1 courses, each in a different language, in any combination (Higher Level or Standard Level) of the two courses offered may earn a Bilingual Diploma.

Both the *Language A: Literature* course and the *Language A: Language and Literature* course are offered at SL and HL. Group 1 courses are designed to support future academic study by developing a high social, aesthetic and cultural literacy, as well as effective communication skills. While there is significant difference in the texts presented for study in the two courses, they will overlap. The main difference lies in the different areas of focus each takes. In the *Language A: Literature* course, students develop an understanding of the techniques involved in literary criticism and the ability to form independent literary judgments, and they explore how literature comments on culture, identity, and society. The *Language A: Language and Literature* course focuses on developing and understanding the constructed nature of meanings generated by language and the function of context in this process. For each course, the syllabus and assessment requirements are identical for all languages offered. In cases where the student's mother-tongue is not offered, a student may be allowed to study his or her particular Language A as a school-supported self-taught Language A: Literature course (SL only) with the support of an external tutor and under the supervision of a school-appointed teacher.

Language A: Literature
English: HL/SL

This course may also be offered in German, Spanish, or other languages depending on the projected cohort of students for each year. Please check with the IB Coordinator when selecting courses.

The teaching and assessment of any Language A will be conducted in that language. Through the study of a wide range of literature, *Language A: Literature* encourages students to appreciate the artistry of literature while developing an ability to reflect critically on their reading. Works are studied in their literary and cultural contexts, through close study of individual texts and passages, and by considering a range of critical approaches. In view of the international nature of the IB and its commitment to intercultural understanding, the Language A: Literature course does not limit the study of works to the products of one culture, or the cultures covered by any one language.

The study of works in translation is especially important in introducing students, through literature, to other cultural perspectives. The response to the study of literature is through oral and written communication, thus enabling students to develop and refine their command of language.

Language A: Literature is a flexible course that allows teachers to choose works from prescribed lists of authors and to construct a course that suits the particular needs and interests of their students.

Throughout the two-year course, students keep a learner portfolio consisting of activities in which they respond critically or creatively to the texts studied in class. Official assessments include an analysis of an "unseen" literary passage (2 unseen passages at HL), a comparative essay on two literary texts, an individual oral, and a literary essay on a chosen text (HL only).

Language A: Language and Literature
English: HL/SL

The Language and Literature course is aimed at both native speakers of English and students whose first language is not English but who have a high level of proficiency in the language. The course concentrates on both the study of literature and language. Students explore how language develops in specific cultural contexts, how it impacts the world, and how language shapes both individual and group identity. Students look at language and mass communication, focusing on the way language is used in the media, which will include newspapers, magazines, the Internet, documentaries, song, and film. We concentrate especially on how mass media use language and image to inform, persuade, and entertain. Students also concentrate on the relationship between literature and issues at large, such as familial relationships, power, and identity. We consider the changing historical, cultural, and social contexts in which particular texts are written and received. We also focus on literature, but our emphasis is on the critical study of the text where we explore the literary works in detail.

Throughout the two-year course, students keep a learner portfolio consisting of activities in which they respond critically or creatively to the texts studied in class. Official assessments include an analysis of an "unseen" non-literary passage (2 unseen passages at HL), a comparative essay on two literary texts, an individual oral, and an essay on a chosen text (HL only).

Group 2: Language Acquisition

Language acquisition courses share a set of aims, but the assessment objectives are differentiated according to what the students are expected to be able to demonstrate at the end of each course.

The aims of Group 2 are to:

1. Develop international mindedness through the study of languages, cultures, and ideas and issues of global significance;
2. Enable students to communicate in the language they have studied in a range of contexts and for a variety of purposes;
3. Encourage, through the study of texts and through social interaction, an awareness and appreciation of the different perspectives of people from other cultures;
4. Develop students' awareness of the role of language in relation to other areas of knowledge;
5. Develop students' awareness of the relationship between the languages and cultures with which they are familiar;
6. Provide students, through language learning and the process of inquiry, with opportunities for intellectual engagement and the development of critical and creative thinking skills;
7. Provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of an additional language;
8. Foster curiosity, creativity, and a lifelong enjoyment of language learning.

Language ab initio and Language B are language acquisition courses designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. This process encourages the learner to go beyond the confines of the classroom, expanding an awareness of the world and fostering respect for cultural diversity. Language ab initio and Language B develop students' linguistic abilities through the development of receptive, productive and interactive skills. The most important consideration is that the course should be a challenging educational experience for the student.

Language ab initio
French/Spanish: SL

The Language ab initio course is organized into five themes.

- Identity
- Experiences
- Social Organizations
- Human Ingenuity
- Sharing the Planet

Each theme has a list of topics that provide the students with opportunities to practice 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. Each language ab initio course has a language-specific syllabus (see the Language ab initio guide "Syllabus content") that is used in conjunction with the guide. Language ab initio is available at SL only. There are five assessment objectives for the language ab initio course. Students will be assessed on their ability to:

1. Communicate clearly and effectively in a range of contexts and for a variety of situations.
2. Understand and use language appropriate to a range of interpersonal and/or intercultural contexts and audiences.
3. Understand and use language to express and respond to a range of ideas with fluency and accuracy.
4. Identify, organize, and present ideas on a range of topics.
5. Understand, analyze, and reflect upon a range of written, audio, visual, and audio-visual texts.

Language B
French B/Spanish B: HL/SL

This course may also be offered in German, depending on the projected cohort of students for each year. Please check with the IB Coordinator when selecting courses.

Language B is a language course designed for students with some previous knowledge of the target language, and may be studied at SL or HL. The focus of the Language B course is on language acquisition and intercultural understanding. This course explores the core topics of Identity, Experiences, Social Organizations, Human Ingenuity, and Sharing the Planet. The course emphasizes the use of language for active communication.

HL students will broaden their understanding of cultures through the reading of two works of literature. SL and HL students and will develop their strategies for reading and their skills of interpretation and analysis in preparation for a written task, using short stories and magazine or newspaper articles. Students continue to work on the development of oral and written expression in order to be able to express themselves accurately and resourcefully in the target language, using correct register and format for a variety of written text types which include: formal/informal letters, journal entries, articles, interviews, speeches, etc. Students will be assessed on their ability to:

1. Communicate clearly and effectively in a range of contexts and for a variety of situations.
2. Understand and use language appropriate to a range of interpersonal and/or intercultural contexts and audiences.
3. Understand and use language to express and respond to a range of ideas with fluency and accuracy.
4. Identify, organize, and present ideas on a range of topics.
5. Understand, analyse, and reflect upon a range of written, audio, visual, and audio-visual texts.

Group 3: Individuals and Societies

The aims of all subjects in Group 3, Individuals and Societies, are to:

1. encourage the systematic and critical study of: human experience and behaviour; physical, economic and social environments; and the history and development of social and cultural institutions;
2. develop in the student the capacity to identify, to analyse critically and to evaluate theories, concepts and arguments about the nature and activities of the individual and society;
3. enable the student to collect, describe and analyse data used in studies of society, to test hypotheses, and to interpret complex data and source material;
4. promote the appreciation of the way in which learning is relevant both to the culture in which the student lives, and to the culture of other societies;
5. develop an awareness in the student that human attitudes and beliefs are widely diverse and that the study of society requires an appreciation of such diversity;
6. enable the student to recognize that the content and methodologies of the subjects in group 3 are contestable and that their study requires the tolerance of uncertainty.

Digital Society: HL/SL

Digital Society is an interdisciplinary course designed for young people interested in exploring the impact and importance of digital systems and technologies in the contemporary world. Digital Society is intended to touch on a broad range of topics in the social studies, media, humanities, IT, and related subject areas.

The course integrates concepts, content, and contexts through inquiry.

- **Concepts** such as expression, space and identity highlight powerful, pervasive, and debatable perspectives that provide insight for inquiry.
- **Content** informs inquiry with details about digital systems including areas related to data, algorithms, media, AI, robotics, and more.
- **Contexts** situate inquiry into areas significant to life in digital society including social, cultural, and environmental contexts.

In addition, HL students consider important contemporary challenges and digital interventions. The course aims support SL and HL students on their inquiry journey as they:

1. Focus inquiry using course concepts, content, and contexts as well as real-world examples,
2. Explore diverse sources relevant to digital society,
3. Investigate impacts and implications of digital systems for people and communities,
4. Reflect on emerging trends, future developments, and further insights, and
5. Share discoveries about digital society with others.

Economics: **HL/SL**

The course uses scientific methodologies that include quantitative and qualitative elements. The course emphasizes the economic theories of microeconomics, which deal with economic variables affecting individuals, firms, and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments, and societies. These economic theories are not to be studied in a vacuum—rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability.

The ethical dimensions involved in the application of economic theories and policies permeate throughout the economics course as students are required to consider and reflect on human end-goals and values. The Economics course encourages students to develop international perspectives, fosters a concern for global issues, and raises students' awareness of their own responsibilities at a local, national, and international level. The course also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interdependent world.

The aims of the Economics syllabus at SL and HL are to enable students to:

1. develop an understanding of microeconomic and macroeconomic theories and concepts and their real-world application;
2. develop an appreciation of the impact on individuals and societies of economic interactions between nations;
3. develop an awareness of development issues facing nations as they undergo the process of change.

History: HL/SL

History is an exploratory subject that poses questions without providing definitive answers. Students must engage with it both through exposure to primary historical sources and through the work of historians. History both requires and develops an individual's understanding of, and empathy for, people living in other periods and contexts. The History course consists of a standard level (SL) and higher level (HL) core syllabus comprising an in-depth study of an individual prescribed subject and the selection of two topics. The course requires students to make comparisons between similar and dissimilar solutions to common human situations, whether they be political, economic or social. It invites comparisons between, but not judgments of, different cultures, political systems and national traditions. The aims of the History course at SL and HL are to:

1. promote an understanding of history as a discipline, including the nature and diversity of its sources, methods and interpretation;
2. encourage an understanding of the present through critical reflection upon the past;
3. encourage an understanding of the impact of historical developments at national, regional and international levels;

4. develop an awareness of one's own historical identity through the study of the historical experiences of different cultures.

Psychology: HL/SL

The Psychology course examines the interaction of biological, cognitive, and sociocultural influences on human behavior, thereby adopting an integrative approach. Understanding how psychological knowledge is generated, developed, and applied enables students to achieve a greater understanding of themselves and appreciate the diversity of human behavior. The ethical concerns raised by the methodology and application of psychological research are key considerations in IB Psychology. In addition, the aims of the Psychology course at SL and at HL are to:

1. develop an awareness of how psychological research can be applied for the benefit of human beings;
2. ensure that ethical practices are upheld in psychological inquiry;
3. develop an understanding of the biological, cognitive, and sociocultural influences on human behavior;
4. develop an understanding of alternative explanations of behavior;
5. understand and use diverse methods of psychological inquiry.

Group 4: Sciences

Biology/Chemistry/Physics: HL/SL

To fulfill the requirements of the IB Diploma Programme, all students must study at least one Group 4 Science subject at HL or SL; or Environmental Systems and Societies (ESS) for students wishing to take two Group 6 Art subjects. To fulfill the requirements of Group 4 Sciences, all students must have completed the Group 4 Project (a collaboration project between all the sciences) and carried out an independent investigation (I.I.) in their chosen science for the internal assessment component of the course. Students who take ESS are required to participate in the Group 4 Project, to help them prepare for their I.I. and have an appreciation of the other sciences through cooperation and responsibility appropriate for effective investigation and problem solving.

Biology: SL

Students who study Biology SL will cover the core topics of Form and Function; Interaction and Interdependence; Continuity and Change; and carry out 40 hours of experimental work. Refer to Ibo.org subject brief for greater details.

Biology: HL

Students who study Biology HL cover all the topics in Biology SL, but in greater depth and detail and carry out 60 hours of experimental work. Refer to Ibo.org subject brief for greater details.

Chemistry: SL

Students who study Chemistry SL cover the core topics of Models of the particulate nature of matter; Models of bonding and structure; Classification of matter; What drives chemical reactions; How much, how fast and how far; What are the mechanisms of chemical change; and carry out 40 hours of experimental work. Refer to Ibo.org subject brief for greater details.

Chemistry: HL
Students who study Chemistry HL cover the same topics as the SL course, but with additional depth and content, and carry out 60 hours of experimental work. Refer to Ibo.org subject brief for greater details. .

Physics: SL
Students who study Physics SL cover the core topics of space, time and motion; the particulate nature of matter; wave behavior; fields; nuclear and quantum physics; and carry out 40 hours of experimental work. Refer to Ibo.org subject brief for greater details.

Physics: HL
Students who study Physics HL cover all the topics in Physics SL course, but with additional depth and content, and carry out 60 hours of experimental work. Refer to Ibo.org subject brief for greater details.

Environmental Systems and Societies: SL
Students interested in ESS must have successfully completed one year of Biology. Students will study the following topics: Foundations of environmental systems and societies; Ecosystems and ecology; Biodiversity and conservation; Water and aquatic food production systems and societies; Soil systems and terrestrial food production systems and societies; Atmospheric systems and societies; Climate change and energy production; and Human systems and resource use.

Group 5: Mathematics

The aims of all mathematics courses in Group 5 are to enable students to:

1. enjoy mathematics, and develop an appreciation of the elegance and power of mathematics;
2. develop an understanding of the principles and nature of mathematics;
3. communicate clearly and confidently in a variety of contexts;
4. develop logical, critical and creative thinking, and patience and persistence in problem-solving;
5. employ and refine their powers of abstraction and generalization;
6. apply and transfer skills to alternative situations, to other areas of knowledge and to future developments;
7. appreciate how developments in technology and mathematics have influenced each other;
8. appreciate the moral, social and ethical implications arising from the work of mathematicians and the applications of mathematics;
9. appreciate the international dimension in mathematics through an awareness of the universality of mathematics and its multicultural and historical perspectives;
10. appreciate the contribution of mathematics to other disciplines, and as a particular "area of knowledge" in the TOK course.

Problem-solving is central to learning mathematics and involves the acquisition of mathematical skills and concepts in a wide range of situations, including non-routine, open-ended and real-world problems. Having followed an IB mathematics SL course, students will be expected to demonstrate the following:

1. Knowledge and understanding: recall, select and use their knowledge of mathematical facts, concepts and techniques in a variety of familiar and unfamiliar contexts.
2. Problem-solving: recall, select and use their knowledge of mathematical skills, results and models in both real and abstract contexts to solve problems.
3. Communication and interpretation: transform common realistic contexts into mathematics; comment on the context; sketch or draw mathematical diagrams, graphs or constructions both on paper and using technology; record methods, solutions and conclusions using standardized notation.
4. Technology: use technology, accurately, appropriately and efficiently both to explore new ideas and to solve problems.
5. Reasoning: construct mathematical arguments through use of precise statements, logical deduction and inference, and by the manipulation of mathematical expressions.
6. Inquiry approaches: investigate unfamiliar situations, both abstract and real-world, involving organizing and analyzing information, making conjectures, drawing conclusions and testing their validity.

IB Mathematics: Analysis and Approaches HL/SL
This course recognizes the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. This course includes topics that are both traditionally part of a pre-university mathematics course (for example, functions, trigonometry, calculus) as well as topics that are amenable to investigation, conjecture, and proof, for instance the study of sequences and series at both SL and HL, and proof by induction at HL.

The course allows the use of technology, as fluency in relevant mathematical software and hand-held technology is important regardless of choice of course. However, Mathematics: Analysis and Approaches has a strong emphasis on the ability to construct, communicate, and justify correct mathematical arguments.

Students should be comfortable in the manipulation of algebraic expressions and enjoy the recognition of patterns and understand the mathematical generalization of these patterns. Students who wish to take Mathematics: Analysis and Approaches at higher level will have strong algebraic skills and the ability to understand simple proof. They will be students who enjoy spending time with problems and get pleasure and satisfaction from solving challenging problems.

A student wishing to take the SL course should have completed Algebra 2 with at least a "B" grade.

A student wishing to take the HL course must have completed Precalculus with at least an "A-" grade.

IB Mathematics: Applications and Interpretation S/L
This course recognizes the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasises the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course also includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. The course makes extensive use of technology to allow students to explore and construct mathematical models. Students in this course will develop mathematical thinking, often in the context of a practical problem and using technology to justify conjectures. Students who choose Mathematics: applications

and interpretation at SL should enjoy seeing mathematics used in real-world contexts and to solve real-world problems.

A student wishing to take this course must have completed Geometry with at least a "B" grade.

The HL level of this course is not currently offered at TASIS England

Group 6: The Arts

Film: HL/SL

Film is a multifaceted area of study that combines technical knowledge, artistic intent, personal expression, project management, collaborative working, historical understanding, and critical thinking. Students will develop practical filmmaking skills through explorative tasks in the five production roles: screenwriter, director, cinematographer, sound designer, and editor. Students will then develop expertise in three of these roles and enjoy many opportunities to find their voice as a filmmaker and collaborate with their peers. Students will also be led through a rigorous training in film analysis, learning how to not just consume a film, but to watch with a critical eye and to see a film through a number of different perspectives. The course will introduce students to film movements from a variety of global contexts and encourage students to consider what film reveals about cultural values, the human experience, and the way we understand the world we live in. To enrich this program of learning, students will visit the annual London Film Festival and participate in practical workshops with film artists.

Open to all students in Grade 11 whether taken as part of the full IB Diploma or as a single-subject IB Certificate. Early entry to the course in Grade 10 is also available for students who have completed "Introduction to Film" in Grade 9 or can demonstrate significant prior experience in practical filmmaking, at the discretion of the Course Leader.

Music: HL/SL

IB Music is a two-year course designed for learners with a variety of musical backgrounds. Learners will take on the roles of researcher, creator, and performer in equal parts, to explore, experiment, and present music. This course aims to: explore a range of musical contexts, musical practices, conventions, and forms of expression; acquire, develop, and experiment with musical competencies through a range of musical practices, conventions, and forms of expression, both individually and in collaboration with others; evaluate and develop critical perspectives on their own music and the work of others.

As this course seeks to provide opportunities to musicians with varied backgrounds, the exploration of diverse musical material is focused through four areas of inquiry: music for sociocultural and political expression; music for listening and performance; music for dramatic impact, movement, and entertainment; music technology in the electronic and digital age.

HL students must also complete a collaborative component: a continuous multimedia presentation documenting a real-life project, containing evidence of the project proposal, the process and evaluation, and the realized project, or curated selections of it.

Students must have a strong understanding of music theory fundamentals, knowledge of musical language/ terminology, and facility of at least one instrument.

Theatre: HL/SL

The course is a multifaceted theatre-making course of study. It gives students the opportunity to make theatre as creators, designers, directors and performers. It emphasizes the importance of working both individually and collaboratively as part of an ensemble. It offers the opportunity to engage actively in the creative process, transforming ideas into action as inquisitive and productive artists. Students learn to apply research and theory to inform and to contextualize their work. The theatre course encourages students to appreciate that through the processes of researching, creating, preparing, presenting and critically reflecting on theatre—as participants and audience members—they gain a richer understanding of themselves, their community and the world. Through the study of theatre, students become aware of their own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices, their processes and their modes of presentation. It enables students to discover and engage with different forms of theatre across time, place and culture and promotes international-mindedness.

Open to all students in Grade 11 whether taken as part of the full IB Diploma, or as a single-subject IB Certificate. Early entry to the course in Grade 10 is also available for students who have completed "Acting 1" in Grade 9, or can demonstrate significant prior experience in practical theatre making, at the discretion of the Course Leader.

Visual Arts: HL/SL

The course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to study visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts. The course encourages students to actively explore the visual arts within and across a variety of local, regional, national, international and intercultural contexts. Through inquiry, investigation, reflection and creative application, Visual Arts students develop an appreciation for the expressive and aesthetic diversity in the world around them, becoming critically informed makers and consumers of visual culture.

Open to all students in Grade 11 whether taken as part of the full IB Diploma, or as a single-subject IB Certificate. Students should have taken a TASIS art course in Grade 9 or 10, such as Introduction to Art or Drawing and Painting, or have an IGCSE qualification or the equivalent.

NOTES



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