

SHANGHAI  
AMERICAN  
SCHOOL

PUXI

# HIGH SCHOOL COURSE CATALOG

2019-2020

258 Jinfeng Road, Huacao Town  
Minhang District, Shanghai  
China 201107, Tel: 6221-1445

Principal  
Mr. John Muldoon  
john.muldoon@saschina.org  
ext. 2514

Vice Principal  
Ms. Margaret Haske  
margaret.haske@saschina.org  
ext. 2541

Vice Principal  
Mr. Scott Mimnaugh  
scott.mimnaugh@saschina.org  
ext. 2516

**COLLEGE COUNSELORS**

Mr. Mark Moody  
Director of College Counseling  
mark.moody@saschina.org  
ext. 2524

Mr. Tom Colt  
tom.colt@saschina.org  
ext. 2520

Mr. Shaun McElroy  
shaun.mcelroy@saschina.org  
ext. 2504

Mr. Sean Menton  
sean.menton@saschina.org  
ext. 2502

**SCHOOL COUNSELORS**

Ms. Linsey Dotson  
linsey.dotson@saschina.org  
ext. 6108

Mr. Tracie Dotson  
tracie.dotson@saschina.org  
ext. 2503

Ms. Ann Ireland  
ann.ireland@saschina.org  
ext. 2509

Mr. Eric Motzko  
eric.motzko@saschina.org  
ext. 2508

Ms. Toni Hewett  
IB Coordinator  
toni.hewett@saschina.org  
ext. 2511

Mr. Adam Fusco  
AP Coordinator  
adam.fusco@saschina.org  
ext. 6154

Ms. Amy Foley  
Innovation Institute Program  
Coordinator  
amy.foley@saschina.org  
ext. 6118

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## SAS MISSION

Shanghai American School inspires in all students:  
上海美国学校激励并培养所有的学生:

A lifelong passion for learning  
终身学习的热情

A commitment to act with integrity and compassion  
诚信和仁爱的信念

The courage to live their dreams.  
追求梦想的勇气。



## SAS CORE VALUES

We believe that:

- Embracing diversity enriches individuals and communities
- Acts of compassion and generosity of spirit create a better world
- When individuals take responsibility for their own decisions, they are empowered to make positive impact
- Each individual has intrinsic value and the potential to contribute to society
- Collaboration is key to overcoming complex challenges and achieving common goals
- Integrity is the foundation of enduring relationships, quality institutions and well-functioning communities
- As global citizens we have a duty to care for the earth and its inhabitants to ensure the well-being of humankind
- Creativity, critical thinking, and a lifelong passion for learning are essential to personal fulfillment and to meet the challenges of the future.

## “BEST FIT” PHILOSOPHY

At Shanghai American School we counsel and strongly encourage families to select an academic program that is guided by our “Best Fit” philosophy. In short, this means taking a program of study that:

- Develops the student’s strengths, interests, and passions
- Matches the student’s learning style
- Challenges the student to grow and develop into a vibrant member of our learning community
- Prepares the student to pursue their preferred course of study in the country of their choosing.

## COURSE RIGOR

SAS advises students to take a maximum of 3 IB HL or 3 AP courses in grades 11 and 12. The most rigorous SAS academic program is defined as 7 AP and/or IB HL credits over a student’s high school career.

## GRADUATION REQUIREMENTS

The School’s graduation requirements are designed to meet accreditation standards and entry requirements for a wide variety of colleges. To be eligible for high school graduation, a student must:

- Earn a minimum of 24 credits
- Attend eight semesters of high school in grades 9 to 12 (therefore no student may graduate early)
- Attend SAS for all of Grade 12

Subject area requirements for graduation include:

- English 4.0 credits
- Mathematics 3.0 credits
- Science 3.0 credits
- Social Studies 3.0 credits
- Fine Arts/Performing Arts 2.0 credits
- Foreign Language 2.0 credits (2 years of the same language)
- Physical Education/Health 2.0 credits
- Electives 5.0 credits



## The International Baccalaureate (IB) Diploma Program

The International Baccalaureate Diploma Program is a rigorous preuniversity course of studies that meets the needs of highly motivated secondary school students.

Designed as a comprehensive two-year curriculum that allows its graduates to fulfill requirements of various national education systems, the diploma model is based on the pattern of no single country but incorporates the best elements of many. It is a deliberate compromise between the specialization required in some national systems and the breadth preferred in others.

All students who take IB courses are required to take the IB exam at the conclusion of the course. Students may register for individual IB courses or for the full IB diploma.



### IB Diploma Subject Requirements

Diploma candidates are required to select one subject from each of the six subject groups, although they can choose a second subject from groups 1 to 4 instead of a creative arts subject. Usually three subjects are taken at Higher Level (HL) and three others at Standard Level (SL). Higher Level courses cover 240 teaching hours and Standard Level courses cover 150 teaching hours. Hence, over a two-year period, some subjects are studied in depth.

### Additional IB Diploma Requirements

The program offers special features in addition to the six subjects of the curriculum that are central to the diploma.

### Theory of Knowledge (TOK)

Students must complete an interdisciplinary course called Theory of Knowledge (TOK). This course is designed to stimulate critical reflection upon the knowledge and experiences gained inside and outside the classroom. TOK challenges students to question the basis of knowledge, to be aware of subjective and ideological bi-

ases, and to develop a personal mode of thought based on analysis of evidence expressed in rational argument. The key element in the IBO's educational philosophy, TOK seeks to develop a coherent approach to learning, which transcends and unifies the academic areas and encourages appreciation of other cultural perspectives.

### Extended Essay (EE)

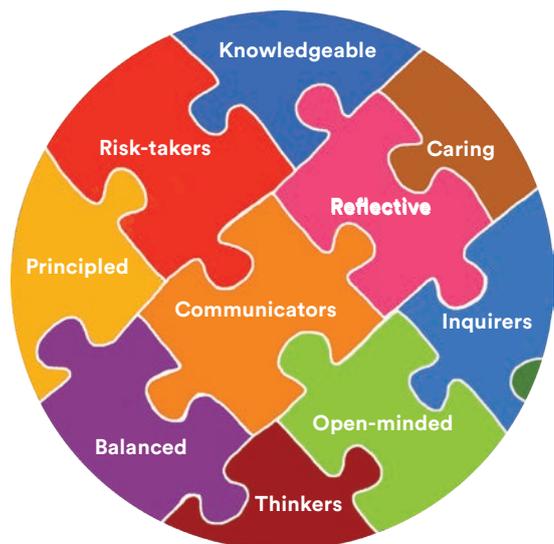
Students must undertake original research and write an extended essay of some 4,000 words. This offers the opportunity to investigate a topic of special interest from within one of their six examination subjects. It also acquaints students with the kind of independent research and writing skills expected at university. Each student works under the guidance of an appropriate subject teacher and will spend approximately 40 hours of private study and writing time to complete the essay.

### Creativity, Activity, and Service (CAS)

The Creativity, Activity, Service (CAS) program involves students in experiential learning through a range of artistic, physical and service activities. It enables students to demonstrate attributes of the IB learner profile in real and practical ways, to grow as unique individuals and to recognize their role in relation to others. Students develop skills, attitudes and dispositions through a variety of individual and group experiences that provide opportunities to explore their interests and express their passions, personalities and perspectives. CAS complements a challenging academic program in a holistic way, providing opportunities for self-determination, collaboration, accomplishment and enjoyment.

### Learner Profile

The aim of all IB Programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.



### Examination Information

Students who register for IB courses must sit for the external exams in May. The registration fees and costs of the exams are the responsibility of the family.



## IB Course Offerings 2019-20

IB Diploma candidates choose:

- 3 HL courses and 3 SL courses
- 1 course from each of the 6 groups, plus Theory of Knowledge (TOK)
- A second course from Groups 1-4 may be substituted for a course in Group 6.

**Group 1**

- English A: literature HL/SL
- English A: language & literature HL/SL
- Chinese A: language & literature HL/SL
- Self-taught Language A: literature SL

**Group 2**

- Mandarin B HL/SL
- Mandarin ab initio SL \*
- French B HL/SL
- French ab initio SL
- Spanish B HL/SL
- Spanish ab initio SL

**Group 3**

- Economics HL/SL
- History HL/SL
- Psychology HL/SL
- Environmental systems & societies SL (can count as group 3 or 4 or as both 3 & 4)
- Information Technology in a Global Society SL/HL\*
- Philosophy SL\*
- Business and Management SL/HL\*

**Group 4**

- Biology HL/SL
- Chemistry HL/SL
- Physics HL/SL
- Environmental systems & societies SL (can count as group 3 or 4 or as both 3 & 4)
- Sports, Exercise & Health Science SL/HL
- Computer Science HL/SL

**Group 5**

- Math: Application and Interpretation SL or HL
- Math: Analysis and Approaches SL or HL

**Group 6**

- Music SL/HL
- Theatre SL/HL
- Visual Arts SL/HL
- Film SL/HL



\* These courses will be taught through Pamoja, an on-line provider. Contact Ms. Toni Hewett if you have any questions. [toni.hewett@saschina.org](mailto:toni.hewett@saschina.org)

## The Advanced Placement (AP) Program



The Advanced Placement (AP) Program is a challenging academic program designed to provide motivated high school students with college-level academic courses.

Established in 1955 by the College Board, the AP Program is considered a standard for academic excellence in the United States. AP courses with qualifying exam grades are accepted for credit, advanced placement or both, by most American colleges and universities.

In addition, AP courses and exam grades are used in the admissions process in more than 400 universities outside of the United States. Students enrolled in an AP course at SAS are required to take the AP exam in May.



### AP Capstone

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

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

AP Capstone was developed in response to feedback from higher education. The two AP Capstone courses, with their associated performance tasks, assessments, and application of research methodology, complement the rigor of AP courses and exams by challenging students to:

- Think critically and creatively to construct meaning or gain understanding
- Plan and conduct a study or investigation
- Propose solutions to real-world problems
- Plan and produce communication in various forms
- Collaborate to solve a problem
- Integrate, synthesize, and make cross-curricular connections

The AP Capstone program begins with the AP seminar course. Students may enroll in this class either grade 10 or grade 11.

### The AP Capstone Diploma or AP Capstone Certificate

Students successfully completing the AP Seminar, AP Research, and four or more AP classes and exams will receive the AP Capstone Diploma. Students successfully completing the AP Seminar and AP Research Exams will receive the AP Capstone Certificate.

### Examination Information

Students who register for AP courses must sit for the external exams in May. The registration fees and costs of the exams are the responsibility of the family.

AP University recognition link:

<http://international.collegeboard.org/programs/ap-recognition>



Students who earn scores of 3 or higher in both of the AP Capstone courses and on four additional AP Exams of their choosing will receive the AP Capstone Diploma™.



Those students who earn scores of 3 or higher in both of the AP Capstone courses but not on the four additional AP Exams will receive the AP Capstone Certificate™, signifying successful performance in those courses.

**AP SEMINAR (Year 1)**

Team Project & Presentation

Research-based Essay & Presentation

Written Exam

**AP RESEARCH (Year 2)**

Academic Thesis

Public Presentation and Defense

**4 AP COURSES (Throughout High School)**

AP EXAM 1

AP EXAM 2

AP EXAM 3

AP EXAM 4

<http://media.collegeboard.com/digitalServices/pdf/ap/ap-capstone-brochure.pdf>  
For more information, please visit [collegeboard.org/apcapstone](http://collegeboard.org/apcapstone)



## AP Capstone Program Year One: AP Seminar

This foundational course, available to grade 10, 11 and 12 provides students with opportunities to think critically and creatively, research, explore, pose solutions, develop arguments, collaborate, and communicate using various media. Students explore real-world issues through a cross-curricular lens and consider multiple points of view to develop deep understanding of complex issues as they make connections between these issues and their own lives.

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

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

### Sample Topics or Themes:

- Education
- Innovation
- Sustainability
- Technology
- Revolution

**Assessment:** During the course, students will be assessed on:

- A team project
- An individual paper and presentation
- A written final exam
- The AP Seminar Exam will be based on all three components and be reported on the standard 1- 5 AP scoring scale.

## AP Capstone Program Year Two: AP Capstone Research

The second course in the AP Capstone experience, available to grade 11 and 12, allows students to design, plan, and conduct a yearlong research-based investigation on a topic of individual interest. Through this inquiry and investigation, students demonstrate the ability to apply scholarly understanding to real-world problems and issues.

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

**Assessment:** Students are assessed through culminating performance tasks:

- Academic thesis paper (approximately 5,000 words) with a defined structure.
- Public presentation, performance, or exhibition and oral defense of research and presentation.
- The AP Research Exam score will be based on the paper, presentation, and defense and will be reported on a 1-5 AP scoring scale.

## AP Capstone Diploma

Students earning passing scores in the seminar course and on the research project, as well as scores of 3 or higher on a minimum of four additional AP Exams, will receive the AP Capstone Diploma, demonstrating their proficiency in college-level subject knowledge, as well as research, communication and collaborative skills.



## Innovation Institute

The Innovation Institute is a transformational approach to education in which students are empowered to solve real-world problems through collaborative and creative processes. The Institute places learners at the center of the educational experience and challenges them to think critically and apply their learning to complex, interdisciplinary tasks. Students are asked to stretch themselves beyond the traditional learning framework by engaging in Project Based Learning that requires the use of 21st century skills.

The Innovation Institute is founded on four core principles.

1. Provide a 21st century learning environment where students actively apply the skills of communication, collaboration, creativity, and critical thinking.
2. Integrate core academic disciplines so that students explore learning concepts by making connections across academic domains.
3. Incorporate relevant, real-life situations through effective implementation of project-based learning.
4. Ensure that interdisciplinary project-based learning is rigorous, and all students taking a specific course will receive instruction driven by the same SAS standards.

Participation in the Innovation Institute requires a two-year commitment. Institute students in grade 9 and 10 are a part of a small learning community with four teachers who collaborate closely in order to provide an integrated learning experience.

Students will take four of their seven courses in the Institute.

These courses are noted below:

### GRADE 9

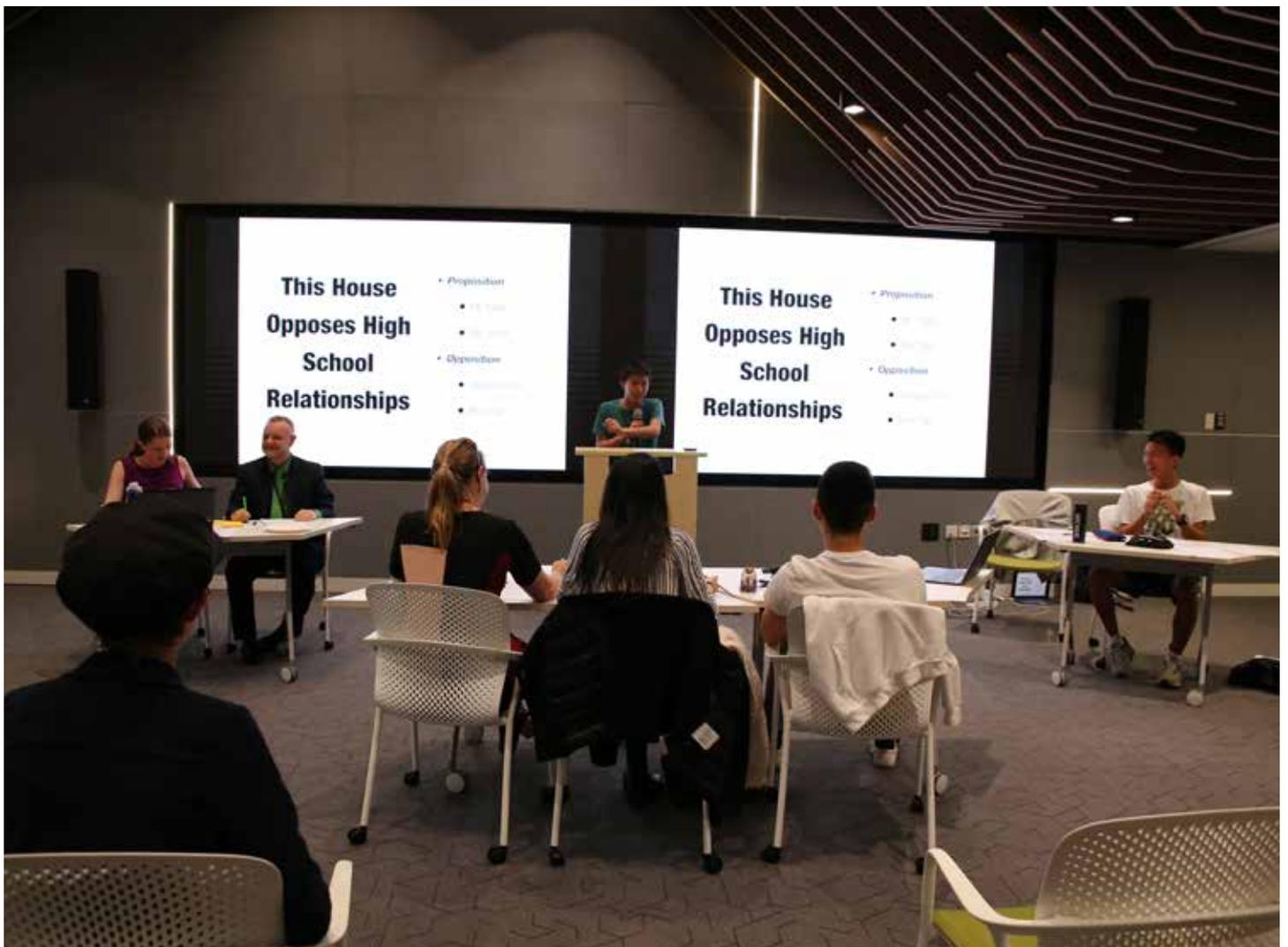
English 9  
Asian History  
Physics-Chemistry Lab Science  
Creativity & Design

### GRADE 10

English 10  
AP Seminar  
Biology Lab Science  
Innovation & Design

What differentiates the Innovation Institute from the core program? The curriculum is taught through shared themes and projects that connect all four Institute courses, which allows students to explore the topics in an applied, real-world manner. During projects, students engage in design thinking processes and receive feedback from experts. Students are assessed through traditional assessments such as quizzes, exams, and essays; however, they will also be asked to apply their learning through collaborative projects that address real-world issues.

For more information about the Innovation Institute please contact Ms. Amy Foley at [PXHS.InnovationInstitute@saschina.org](mailto:PXHS.InnovationInstitute@saschina.org).



# MASTER COURSE LIST

ENGLISH <span style="float: right;">page 12</span>			
Course	Course Codes	Credits	Grades
English 9	HS1000	1	9
English 10	HS1001	1	10
English 11	HS1002	1	11
English 12	HS1003	1	12
IB English A: Literature SL Y1-Y2	HS1110 HS1120	2	11 12
IB English A: Literature HL Y1-Y2	HS1130 HS1140	2	11 12
IB English A: Lang. & Lit. SL Y1-Y2	HS1111 HS1121	2	11 12
IB English A: Lang. & Lit. HL Y1-Y2	HS1131 HS1141	2	11 12
AP English Lang. & Composition	HS1200	1	11,12
AP English Lit. & Composition	HS1201	1	11,12

MATHEMATICS <span style="float: right;">page 15</span>			
Course	Course Codes	Credits	Grades
Integrated Math 1	HS3203	1	9
Integrated Math 2	HS3205	1	9,10,11
Integrated Math 3	HS3207	1	10,11,12
Integrated Math 3 Plus	HS3208	1	10,11,12
Pre-Calculus	HS3004	1	11,12
Adv Pre-Calculus	HS3005	1	10,11
Calculus	HS3006	1	10,11,12
IB Math Application and Interpretation SL Y1	HS3113	1	11
IB Math Application and Interpretation HL Y1	HS3133	1	11
IB Math Analysis and Approaches SL Y1	HS3114	1	11
IB Math Analysis and Approaches HL Y1	HS3134	1	11
AP Calculus AB	HS3200	1	11,12
AP Calculus BC	HS3201	1	11,12
AP Statistics	HS3202	1	11,12
Multivariable Calculus & Series	HS3204	1	12

SOCIAL STUDIES <span style="float: right;">page 18</span>			
Course	Course Codes	Credits	Grades
Asian History	HS2000	1	9
US History	HS2002	1	10
Modern World History	HS2001	1	11,12
Applied Economics & Business	HS2018	1	11,12
IB Information Technology in a Global Society SL Y1-Y2 *	HS2110 HS2120	2	11 12
IB Information Technology in a Global Society HL Y1-Y2 *	HS2130 HS2140	2	11 12
IB History SL Y1-Y2	HS2111 HS2121	2	11 12
IB History HL Y1-Y2	HS2131 HS2141	2	11 12
IB Psychology SL Y1-Y2	HS2113 HS2123	2	11 12
IB Psychology HL Y1-Y2	HS2133 HS2143	2	11 12
IB Economics SL Y1-Y2	HS2114 HS2124	2	11 12
IB Economics HL Y1-Y2	HS2134 HS2144	2	11 12
IB Philosophy SL Y1-Y2 *	HS2145 HS2146	2	11 12
IB Business & Management SL Y1-Y2 *	HS2117 HS2127	2	11 12
IB Business & Management HL Y1-Y2 *	HS2137 HS2147	2	11 12
IB Environmental Systems & Society SL Y1-Y2	HS4115 HS4125	1 Science 1 S.S.	11 12
AP Capstone Seminar: Social Studies	HS2208	1	10,11
AP European History	HS2201	1	11,12
AP US History	HS2202	1	10,11,12
AP Psychology	HS2203	1	11,12
AP Economics	HS2204	1	11,12
AP Comparative Government & Politics	HS2205	1	11,12

\* These courses will be taught online through Pamoja (see page 60 for more details).

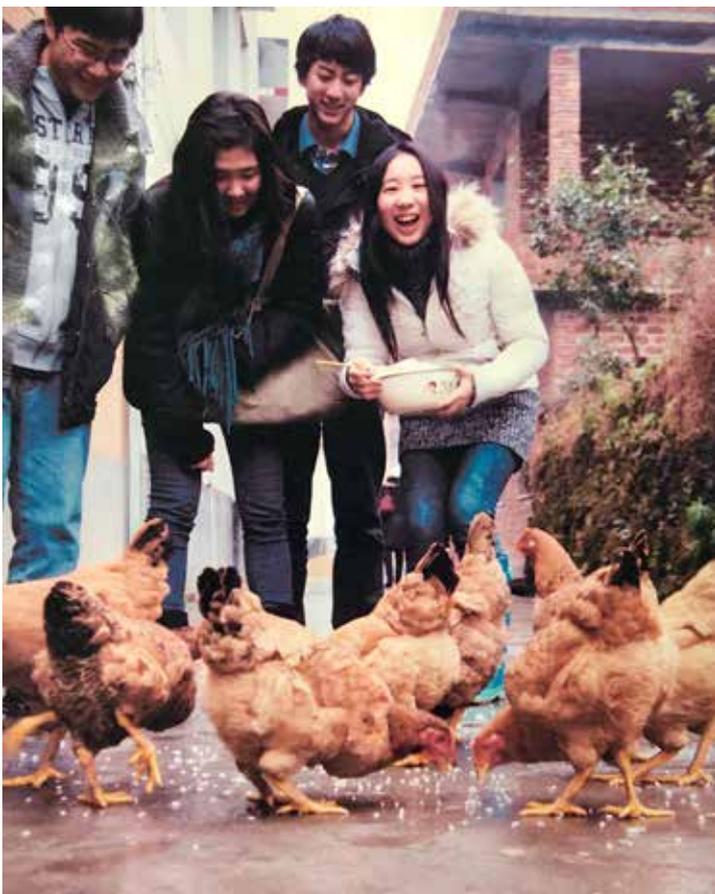


<b>SCIENCE</b>			
			page 23
Course	Course Codes	Credits	Grades
Physics-Chemistry Lab Science	HS4007	1	9
Biology Lab Science	HS4008	1	10
Earth & Space Science	HS4029	1	11,12
Independent Research & Design	HS4207	1	11,12
Chemistry	HS4004	1	11,12
IB Biology SL Y1-Y2	HS4110 HS4120	2	11 12
IB Biology HL Y1-Y2	HS4130 HS4140	2	11 12
IB Chemistry SL Y1-Y2	HS4111 HS4121	2	11 12
IB Chemistry HL Y1-Y2	HS4131 HS4141	2	11 12
IB Physics SL Y1-Y2	HS4112 HS4122	2	11 12
IB Physics HL Y1-Y2	HS4132 HS4142	2	11 12
IB Environmental Systems & Society SL Y1-Y2	HS4115 HS4125	1 Science 1 S.S.	11 12
IB Sports, Exercise & Health Science SL Y1-Y2	HS7030 HS7031	1 Science 1 Elective	11 12
IB Sports, Exercise & Health Science HL Y1-Y2	HS7050 HS7051	1 Science 1 Elective	11 12
AP Biology	HS4200	1	11,12
AP Chemistry	HS4201	1	11,12
AP Physics 1	HS4210	1	11,12
AP Physics C: Mechanics, Electricity & Magnetism	HS4206	1	12

<b>GLOBAL LANGUAGES</b>			
			page 27
Course	Course Codes	Credits	Grades
Accelerated Novice French	HS5052	1	9,10,11,12
Accelerated Intermediate French	HS5053	1	9,10,11,12
French 3	HS5003	1	9,10,11,12
French 4	HS5004	1	10,11,12
IB French B SL Y1-Y2	HS5110 HS5120	2	11 12
IB French B HL Y1-Y2	HS5130 HS5140	2	11 12
IB French <i>ab initio</i> SL Y1-Y2*	HS5151 HS5152	2	11 12
Accelerated Novice Spanish	HS5050	1	9,10,11,12
Accelerated Intermediate Spanish	HS5051	1	9,10,11,12
Spanish 3	HS5007	1	9,10,11,12
Spanish 4	HS5008	1	10,11,12
IB Spanish B SL Y1-Y2	HS5111 HS5121	2	11 12
IB Spanish B HL Y1-Y2	HS5131 HS5141	2	11 12
IB Spanish <i>ab initio</i> SL Y1-Y2	HS5155 HS5156	2	11 12

<b>CHINESE LANGUAGE</b>			
			page 31
Course	Course Codes	Credits	Grades
Foundation Chinese	HS5024	1	9,10,11,12
Foundation Chinese – High	HS5025	1	9,10,11,12
Intermediate Chinese	HS5026	1	9,10,11,12
Intermediate High Chinese (a)	HS5027A	1	9,10,11,12
Advanced Chinese (a)	HS5028A	1	9,10,11,12
Advanced High Chinese (a)	HS5029A	1	9,10,11,12
Chinese Language A (a)	HS5030A	1	9,10,11,12
IB Mandarin <i>ab initio</i> SL *	HS5159 HS5150	2	11 12
IB Mandarin B SL Y1-Y2	HS5113 HS5123	2	11 12
IB Mandarin B HL Y1-Y2	HS5133 HS5143	2	11 12
IB Chinese A: Lang. & Lit. SL Y1-Y2	HS5114 HS5124	2	11 12
IB Chinese A: Lang. & Lit. HL Y1-Y2	HS5134 HS5144	2	11 12

\* This course will be taught online through Pamoja (see page 60 for more details).



VISUAL ARTS			
page 36			
Course	Course Codes	Credits	Grades
ArtLab	HS6064	1	9,10,11,12
2D & 3D Design	HS6209	1	10,11,12
Creativity & Design**	HS6050	1	9
Innovation & Design**	HS6051	1	10
Intermediate Art Studio	HS6207	1	10,11,12
Advanced Art Studio	HS6208	1	11,12
Digital Studio	HS8401	1	10,11,12
Art Coded	HS6065	1	10,11,12
IB Visual Art SL Y1-Y2	HS6110 HS6120	2	11 12
IB Visual Art HL Y1-Y2	HS6130 HS6140	2	11 12
IB Film SL Y1-Y2	HS8165 HS8175	2	11 12
IB Film HL Y1-Y2	HS8185 HS8195	2	11 12

\*\* For the Grade 9 / Grade 10 Innovation Institute students only.

PERFORMING ARTS			
page 39			
Course	Course Codes	Credits	Grades
Concert Choir 1	HS6020	1	9,10,11,12
Concert Choir 2	HS6021	1	9,10,11,12
Concert Band 1	HS6022	1	9,10,11,12
Concert Band 2	HS6023	1	9,10,11,12
Orchestra 1	HS6024	1	9,10,11,12
Orchestra 2	HS6025	1	9,10,11,12
Guitar 1	HS6026	1	9,10,11,12
Guitar 2	HS6027	1	9,10,11,12
Combat, Masks and Movement	HS6061	0.5	9,10,11,12
Acting for Stage and Beyond	HS6062	0.5	9,10,11,12
Audio Production	HS6034A (S1) HS6034B (S2)	0.5	10,11,12
Theatre Making and Directing	HS6063	1	10,11,12
Stagecraft & Theatre Production	HS6032A (S1) HS6032B (S2)	0.5	10,11,12
IB Theatre SL Y1-Y2	HS6112 HS6122	2	11 12
IB Theatre HL Y1-Y2	HS6132 HS6142	2	11 12
IB Music SL Y1-Y2	HS6111 HS6121	2	11,12
IB Music HL Y1-Y2	HS6131 HS6141	2	11,12

PHYSICAL & HEALTH EDUCATION			
page 42			
Course	Course Codes	Credits	Grades
Physical & Health Education 1	HS7000	1	9
Physical & Health Education 2	HS7001	1	10
PE 3 – Personal Fitness	HS7002	0.5	11,12
PE 3 – Sports League	HS7003	0.5	11,12
PE 3 – Swimming & Water Safety Instructor	HS7006	0.5	11,12
PE 3 – Lifeguarding	HS7007	0.5	11,12

ELECTIVE COURSES			
page 45			
Course	Course Code	Credits	Grades
Theory of Knowledge Y1-Y2	HS8101 HS8102	1	11 12
IB Computer Science SL Y1-Y2	HS8115 HS8125	2	11,12
IB Computer Science HL Y1-Y2	HS8135 HS8145	2	11,12
AP Computer Science Principles	HS8204	1	11,12
AP Computer Science A	HS8201	1	11,12
AP Capstone Research	HS8400	1	11,12
Web Design and Virtual Reality	HS8009	1	9, 10, 11, 12
IB Sports, Exercise, & Health Science SL/HL Y1-Y2	HS7050 HS7051	1 Science 1 Elective	11 12
Digital Game Design	HS8011	1	9,10

LEARNING SUPPORT			
page 47			
Course	Course Code	Credits	Grades
Learning Support	HS8901	0	9,10,11,12

ONLINE LEARNING			
page 48			
Course	Course Codes	Credits	Grades
Pamoja Education	HS0	TBD	11,12
Virtual High School	HS9100	TBD	11,12



**ENGLISH COURSES**

**English Department Flow Chart**

Grade 9 students must enroll in:

**English 9**

Grade 10 students must enroll in:

**English 10**

Grade 11 students may choose any of the courses below based on meeting prerequisites:

**English 11**

**AP English Language & Composition**

**AP English Literature & Composition**

**IB English A:  
Language & Literature SL/HL**  
(two-year course)

**IB English A:  
Literature SL/HL**  
(two-year course)

Grade 12 students may choose any of the courses below based on meeting prerequisites:

**English 12**

**AP English Language & Composition**

**AP English Literature & Composition**

**Legend**

- AP course
- IB course
- SAS course

## English 9

Course Code: HS1000

Duration: Year

Prerequisites: None

Credits: 1.0

In this course, students analyze a wide range of literature that is connected to a variety of different cultures. Students study the following genres: novel, short story, poetry, drama, speech, and nonfiction. The literature serves not only as a vehicle for understanding human experience more richly but also as a means for developing critical thinking, language, and communication skills. Students learn the tools of literary and rhetorical analysis and explore a variety of writing styles and forms. Oral communication skills are developed through participation in seminars, discussions, and oral/dramatic presentations.

## English 10

Course Code: HS1001

Duration: Year

Prerequisites: English 9

Credits: 1.0

In this course, students study a wide range of historical and contemporary literature, covering the following genres: novel, short story, poetry, drama, and nonfiction. Students are encouraged to make connections between the literature and their experiences as multicultural students. The writing process is used to allow students to explore a variety of writing styles and forms. Students' oral communication skills are developed through participation in seminars, discussions, and oral/dramatic presentations.

## English 11

Course Code: HS1002

Duration: Year

Prerequisites: English 10

Credit: 1.0

This course is an opportunity for students to continue a deeper exploration of various literary genres and to develop the skills of close reading and literary analysis, as well as both written and oral expression. Through the study of a variety of genres, students are encouraged to connect aspects of the texts they read with their own personal knowledge and experience. Students will be expected to produce a variety of assessments including a research paper or project, written essays, oral presentations, creative pieces, and visual projects.

## English 12

Course Code: HS1003

Duration: Year

Prerequisites: English 11 or AP Language

Credit: 1.0

In this course students will develop their understanding of others and the worlds in which they live through the study of classic and contemporary literature. The course is focused on developing student skills in reading, analysis, written expression, speaking and listening. Students will be expected to read critically, comprehend, and respond to the works through class discussions and written assignments. A variety of assessment types will be used to develop skills including oral presentations, written essays, and a research paper or project.

## IB English A: Literature SL/HL

Course Codes: HS1110 (SL Y1); HS 1120 (SL Y2); HS1130 (HL Y1); HS1140 (HL Y2)

Duration: Two years

Prerequisites: English 10

Credits: 2.0

This course is designed for students interested in developing their analytical skills through the study of literary texts. The parts of the course are:

- Readers, writer and texts – exploring the nature and purpose of literature and the ways in which texts can be read, interpreted and responded to
- Time and Space – draws attention to the fact that texts are not isolated entities, but are connected to space and time
- Intertextuality: connecting texts – focuses on the connections between and among diverse texts, traditions, creators and ideas

The emphasis of the course will be on developing the skills of independent literary analysis, critical reading and the powers of expression in both written and oral communication through the study of literature in a variety of media and modes, from different periods, styles, genres and cultures.

Written compositions, exams, and oral commentary will be assessed through internal (school) and external (IBO) assessments.

At Standard Level students read 9 texts, some in translation, in order to complete the IB assessment tasks.

At Higher Level a greater depth of material is covered and students read 13 texts, some in translation, in order to complete the IB assessment tasks.

The internal oral assessment for HL is more demanding than that of SL, requiring more texts to be used. In addition, the external assessment criteria require the HL students to write an additional essay, show a deeper understanding of content, complete a more in-depth task and show a greater ability to analyze a writer's techniques than SL students.

**Higher Level Coursework:** At Higher Level a greater depth of material is covered and students read 13 texts in order to complete the IB assessment tasks. Two of the assessment tasks for HL are more demanding than those of SL. In addition, the external assessment criteria require the HL students to show a deeper understanding of content and greater ability to analyze a writer's techniques than SL students.



**IB English A: Language & Literature SL/HL**

Course Codes: HS1111 (SL Y1); HS 1121 (SL Y2); HS1131 (HL Y1); HS1141 (HL Y2)

Duration: Two years

Prerequisites: English 10

Credits: 2.0

The Language and Literature course is designed to encourage students to question the meaning generated by language and texts.

Students will develop their analytical skills through the study of literary texts, nontraditional texts and topics dealing with language in cultural contexts, and language in mass communication.

The parts of the course are:

- Readers, writer and texts – exploring the nature and purpose of literature and the ways in which texts can be read, interpreted and responded to
- Time and Space – draws attention to the fact that texts are not isolated entities, but are connected to space and time
- Intertextuality: connecting texts – focuses on the connections between and among diverse texts, traditions, creators and ideas

Each part of the course is accompanied by six questions, linked to course concepts, that provide a guide to the learning in each part of the course.

The emphasis of the course will be on developing the skills of independent textual analysis, critical reading and the powers of expression in both written and oral communication through the study of language and literature in a variety of media and modes, from different periods, styles, genres and cultures.

Written compositions, exams, and oral commentary will be assessed through internal (school) and external (IBO) assessments.

All students are expected to read a breadth of non-literary texts. In addition:

Standard Level students read four texts, some in translation, in order to complete the IB assessment tasks.

Higher Level a greater depth of material is covered and students read six texts, some in translation, in order to complete the IB assessment tasks.

The internal assessment task for HL is more demanding than that of SL, requiring more texts to be used and a longer presentation. In addition, the external assessment criteria require the HL students to show a deeper understanding of content, write comparatively, complete more in-depth tasks and show a greater ability to analyze a writer's techniques than SL students.

**AP English Language & Composition**

Course Code: HS1200

Duration: Year

Prerequisites: English 10

Credits: 1.0

The goal of AP English Language and Composition is to develop the high-level skills students will need to read and write effectively in their college courses and in their personal and professional lives. Students will read and write many different kinds of essays: argumentative, synthesis, and analytical. Students signing up for AP English Language need to have the skills necessary to handle a high-level composition course. In addition, a high degree of responsibility for class participation and independent learning is expected from students. All students enrolled in an AP subject must sit the external exam at the end of the school year.

**AP English Literature & Composition**

Course Code: HS1201

Duration: Year

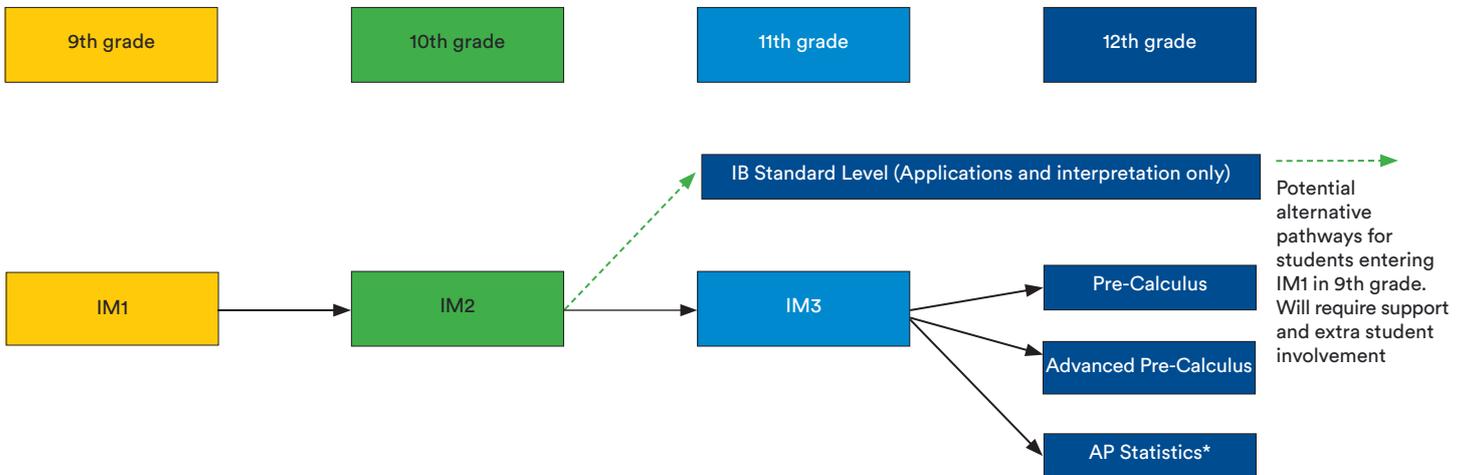
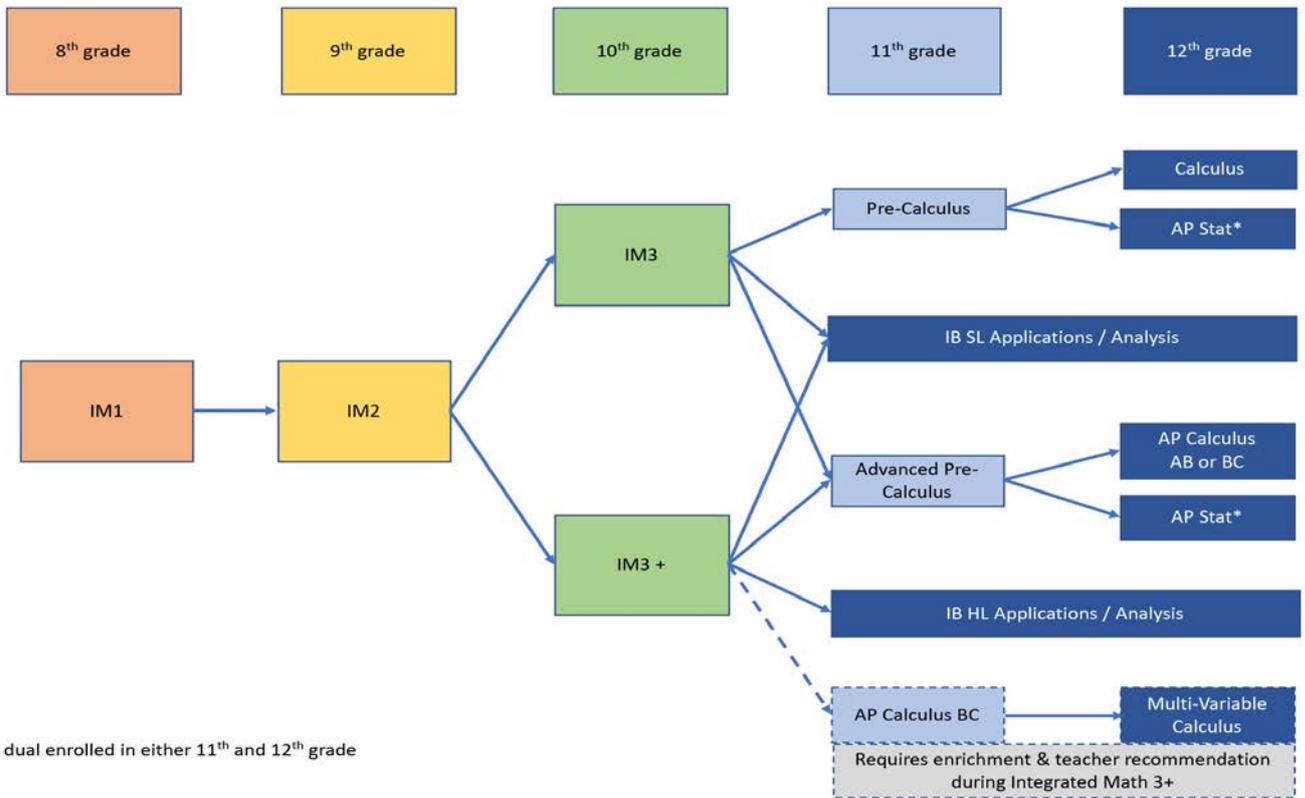
Prerequisites: English 10

Credits: 1.0

The AP English Literature and Composition course will engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students will deepen their understanding of the ways writers use language to provide meaning and pleasure as well as such smaller scale elements as the use of figurative language, imagery, symbolism, and tone. The course will include intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. In addition to considering a work's literary artistry, the students will confront the author's explicit or implicit teaching about life. Writing will be an integral part of the AP English Literature and Composition course, focusing on the critical analysis of literature and will include expository, analytical, and argumentative essays. All students enrolled must sit the College Board exam in May.

# MATHEMATICS COURSES

Mathematics Department Flow Chart



**Integrated Math 1 (IM1)**

Course Code: HS3203

Duration: Year

Prerequisites: Pre-Algebra equivalent

Credits: 1.0

Integrated Mathematics 1 is the first of a three-course sequence based on Common Core State Standards. Integrated Math I topics include recognizing and developing patterns using tables, graphs, and equations. Mathematical modeling is stressed as a methodology for approaching the solution to problems. Students will explore operations on algebraic expressions and apply mathematical properties to algebraic equations. Students will problem solve using equations, graphs and tables, and investigate linear relationships, including comparing and contrasting options and decision-making using algebraic models. Reinforcement of topics from two-dimensional Geometry is integrated into this curriculum. This includes applications from the areas of perimeter and area, the Pythagorean Theorem and its applications, as well as geometric proportion. Finally, introductory instruction in the area of mathematical probability is provided to reinforce use of fractions and numerical modeling. Technology will be used to introduce and expand upon the areas of study listed above.

**Integrated Math 2 (IM2)**

Course Code: HS3205

Duration: Year

Prerequisites: IM1

Credits: 1.0

Integrated Math 2 is the second course of the Integrated Mathematics progression based on Common Core State Standards. This course continues to explore functions through different representations of quadratic, exponential, trigonometric and other relationships while connecting the ideas of irrational and imaginary numbers. An introduction to proofs includes but is not limited to trigonometric identities, similarity and circle theorems. Elementary probability focuses on the ideas of compound events and conditional probability, as well as the use of probability to evaluate outcomes of decisions. Additional topics include right triangle trigonometry, analysis of conic sections, and using data to build models. A main focus of this course is the application of main ideas in new and different contextual situations.

**Integrated Math 3 (IM3)**

Course Code: HS3207

Duration: Year

Prerequisites: IM 2

Credits: 1.0

Integrated Math 3 is the third course of the Integrated Mathematics progression based on Common Core State Standards. This course continues to explore functions through different representations of polynomial, rational, radical, exponential and trigonometric relationships. Emphasis will be placed on applying trigonometric concepts to general triangles, the unit circle, trigonometric equations and identities. Additional topics include statistics with emphasis on statistical inference and using data for mathematical modeling. A main focus of this course is the application of main ideas in new and different contextual situations.

**Integrated Math 3 Plus (IM3+)**

Course Code: HS3208

Duration: Year

Prerequisites: IM2

Credits: 1.0

Integrated Math 3 Plus is the third course of the Integrated Mathematics progression based on Common Core State Standards, but the content of the regular Integrated Math 3 course will be explored at a deeper level and the course also covers additional content. This course continues to explore functions through different representations of polynomial, rational, radical, exponential and trigonometric relationships. Emphasis will be placed on applying trigonometric concepts to general triangles, the unit circle, trigonometric equations and identities. Additional topics include statistics with emphasis on statistical inference and using data for mathematical modeling. A main focus of this course is the application of main ideas in new and different contextual situations.

In addition, this course contains advanced functional analysis (composite, inverse and logarithmic functions), advanced trigonometry, complex functions and an introduction to vectors.

**Pre-Calculus**

Course Code: HS3004

Duration: Year

Prerequisites: IM3/IM3+

Credits: 1.0

The major focus of this course is on functions. Topics covered include relations, functions and their graphs, polynomials, right triangle trigonometry, laws of sine/cosine, trigonometric identities, graphing of sine and cosine functions, advanced functions and conics. This course is designed for students with gaps in Algebra and prepares them for Calculus. Students are required to purchase a TI 84+ calculator.

**Advanced Pre-Calculus**

Course Code: HS3005

Duration: Year

Prerequisites: IM3/IM3+

Credits: 1.0

This course expands on topics introduced in Algebra 2/Trigonometry and introduces topics needed for further study of mathematics in AP Calculus or in IB Math HL. Advanced Pre-Calculus is recommended for students who are above average in mathematics ability. Topics of study include relations, advanced functions and graphs, trigonometry, vector and parametric equations, sequences and series, combinatorics and probability, and conics. Time permitting, polar coordinates and complex numbers will also be studied. Attention will be given to applying the above concepts to real-world problems. Students are required to purchase a TI 84+ calculator.

**Calculus**

Course Code: HS3006

Duration: Year

Prerequisites: Pre-Calculus

Credits: 1.0

This course explores limits, derivatives of algebraic and transcendental functions, differentiation techniques, related rates, definite integrals, indefinite integrals and anti-differentiation, numerical integration, areas of planar regions, volumes and surface areas of solids of revolution. Students are required to purchase a TI 84+ calculator.

**IB Math: Application and Interpretation SL Y1-Y2**

Course Codes: HS3113 (Y1), HS3123 (Y2)

Duration: Two years

Prerequisites: IM2

Credits: 2.0

This course is designed for students whose primary interests lie outside mathematics and the physical sciences. Core topics covered include functions, algorithms, sequences and series, applications involving compound interest, probability, statistics, trigonometry, linear programming, geometry in three dimensions, differential calculus, an introduction to integration and applications to finance.

Writing a mathematical exploration and working on precise math communication are significant parts of this course. Students are required to purchase a TI 84+ calculator.

**IB Math: Application and Interpretation HL Y1-Y2**

Course Codes: HS3133 (Y1), HS3143 (Y2)

Duration: Two years

Prerequisites: IM3+

Credits: 2.0

This course is designed for students with a strong background in mathematics. It prepares students for various areas of university studies such as business, medicine, statistics, economics and others. In addition to the topics describe in SL, the HL course include logarithms, complex numbers, polar form, matrices, composite functions, and vectors. This course will also explore differentiation, integration and statistics to a much greater depth than the SL course.

Writing a mathematical exploration and working on precise math communication are significant parts of this course. IB Math HL is for students who like challenges and have very good study habits. Students are required to purchase a TI 84+ calculator.

**IB Math: Analysis and Approaches SL Y1-Y2**

Course Codes: HS3114(Y1), HS3124(Y2)

Duration: Two years

Prerequisites: IM3/IM3+

Credits: 2.0

This course is designed for students with a sound background in mathematics. It prepares students for various areas of university studies such as mathematics, engineering, physical sciences, economics and others. The topics studied include algebra, functions and equations, circular functions and trigonometry, statistics and probability, differential and integral calculus.

Writing a mathematical exploration and working on precise math communication are significant parts of this course. Students are required to purchase a TI 84+ calculator.

**IB Math: Analysis and Approaches HL Y1-Y2**

Course Codes: HS3134Y1), HS3144 (Y2)

Duration: Two years

Prerequisites: IM3+

Credits: 2.0

This course is designed for students with a strong background in mathematics and interest in perusing university studies in technology, mathematics or the physical sciences. In addition to the topics describe in SL, the HL course includes complex numbers, polar form, and vectors. This course will also explore functions, differentiation, integration and statistics to a much greater depth than the SL course.

Writing a mathematical exploration and working on precise math communication are significant parts of this course. IB Math HL is for students who like challenges and have very good study habits. Students are required to purchase a TI 84+ calculator.

**AP Calculus AB**

Course Code: HS3200

Duration: Year Prerequisites: Advanced Pre-Calculus

Credits: 1.0

This course explores the major topics required for AP Calculus AB, and is equivalent to the first semester of a traditional college calculus course. Topics include limits, derivatives of algebraic and transcendental functions, differentiation techniques, extremization, related rates, Riemann sums and the definite integral, indefinite integrals and anti-differentiation, numerical integration, areas of planar regions, and volumes and surface area of solids of revolution. Students are required to purchase a TI 84+ calculator. All students enrolled in an AP subject must sit the external exam at the end of the school year.

**AP Calculus BC**

Course Code: HS3201

Duration: Year

Prerequisites: Advanced Pre-Calculus or AP Calculus AB

Grade 11/12 Student with 2+ years of math

Credits: 1.0

This course is an accelerated version of AP Calculus AB to allow completion of the BC syllabus in one year. This course is equivalent to the first two semesters of university-level calculus. The major topics include those listed in AB Calculus and the additional BC-level topics: improper integrals and further applications of integrals, differential equations and Euler's method, Hospital's rule, analysis of planar curves, polynomial approximations and series, and parametric, polar, and vector functions. The offering of this course is subject to enrollment. Students are required to purchase a TI 84+ calculator. All students enrolled in an AP subject must sit the external exam at the end of the school year.

**AP Statistics**

Course Code: HS3202

Duration: Year

Prerequisites: IM3/IM3+

Credits: 1.0

AP Statistics is a course designed to introduce students to the major concepts necessary for collecting, organizing, analyzing, and interpreting data. The four broad conceptual themes are exploring data, designing a study, anticipating patterns using simulations and probability, and statistical inference. While this course relies on complex math concepts, this is not a traditional math course. The major emphases are reading, writing, conceptual understanding, interpretation and judgment, analysis, the ability to compare and contrast.

The school's offering of this course is subject to student enrollment. Students are required to have a TI 84+ calculator. All students enrolled in an AP subject must sit the external exam at the end of the school year.

**Multivariable Calculus & Series**

Course Code: HS3204

Duration: Year

Prerequisites: AP Calculus BC

Credits: 1.0

This course is equivalent to a third semester college calculus course. Students investigate the geometry of three-dimensional curves and surfaces, and extend the single-variable concepts of derivatives and integrals to three and more dimensions. The process of finding a minimum or maximum value of a function of several variables is illustrated, and the techniques used to find the volume of a three-dimensional region and the average value of a given function over such a region are explored. Differential and integral calculus of several variables are the focal points of this college-level course which extends the BC Calculus experience to three dimensions, culminating in several calculus applications to physics including Stokes', Green's, and Gauss' Theorems.

# SOCIAL STUDIES COURSES

## Social Studies Department Flow Chart

Grade 9 students must enroll in:

**Asian History**

Grade 10 students may choose any of the courses below based on meeting prerequisites:

**US History**

**AP Capstone Seminar:  
Social Studies**

**AP US History**

Grade 11 and 12 students may choose any of the courses below based on meeting prerequisites:

**AP  
Psychology**

**AP Compative  
Government  
& Politics**

**Applied Economics  
& Business**

**Modern World History**

**AP Capstone Seminar:  
Social Studies**

**IB Psychology  
HL/SL  
(two-year course)**

**AP Economics**

**AP US History**

**IB Environmental  
Systems & Society  
SL (two-year course)  
1 credit Science  
1 credit Social Studies**

**IB Economics  
HL/SL  
(two-year course)**

**AP European History**

**\* IB Philosophy SL  
(two-year course)**

**\* IB Business &  
Management HL/SL  
(two-year course)**

**IB History SL/HL  
(two-year course)**

**\* IB Info. Technology  
in a Global Society  
HL/SL  
(two-year course)**

**Legend**

- AP course
- IB course
- SAS course

\* These courses will be taught online through Pamoja.

## Asian History

Course Code: HS2000

Duration: Year

Prerequisites: None

Credits: 1.0

Asian History fulfills the Grade 9 Social Studies requirement. This is a general survey course designed to better acquaint students with the history of Asia. By emphasizing writing development, research skills, and the analysis of historical sources and documents, students will be provided with the skills needed for a successful transition to the 10th grade. We will use the categories of politics, economics and social organization to learn content knowledge.

## US History

Course Code: HS2002

Duration: Year

Prerequisites: Asian History

Credits: 1.0

U.S. History is a course that will look at major historical events that shaped the identity of the United States. The primary focus of the course is the mid 19th century to the present. The curriculum structure of this course will focus on themes in which students will develop an understanding of the struggles, opportunities, and challenges that have faced America throughout its history. Students will be taught to think critically, develop writing skills, analyze documents and develop historical thinking skills that will prepare them for continued study in the Social Studies area.

## Modern World History

Course Code: HS2001

Duration: Year

Prerequisites: Grade 11 or Grade 12

Credits: 1.0

Modern World History will focus on gaining an understanding of how the world of today was shaped by ideas, people and events in the past. It will cover the period from the Industrial Revolution through Decolonization and Independence movements. The class is built around a variety of activities that require research, writing and critical thinking. Students are encouraged to develop their skills as a historian such as research, analysis, and forming arguments. It is hoped that students will develop a continuing love for the study of history, as this course will prepare students for further study in this subject.

## Applied Economics & Business

Course Code: HS2018

Duration: Year

Prerequisites: Grade 11 or Grade 12

Credits: 1.0

Applied Economics & Business is a hands-on, experiential course which requires active, consistent class participation. Students will work in groups and individually, and technology will be used on a regular basis. Students will gain a firm foundation in business terminology, practices, and entrepreneurial skills by creating, managing, and marketing products and services of their own design. In each semester students will focus on the core elements of business, including finance and accounting, marketing, human resources, and strategy. They will focus on these areas as part of developing a new idea for an entrepreneurial venture.

## IB History SL/HL Y1-Y2

Course Codes: HS2111 (SL Y1), HS2121 (SI Y2); HS2131 (HL Y1); HS2141 (HL Y2)

Duration: Two years

Prerequisites: Grade 11 or Grade 12

Credits: 2.0

This is a world history course, based on a comparative and multi-perspective approach to history, with the emphasis on the 20th century. We study a variety of types of history, including political, economic, social, and cultural. The course emphasizes that students think historically, develop skills of critical thinking, and develop an understanding of multiple interpretations of history. Both HL and SL students investigate Europe between two world wars, how World War II developed into a global conflict, the Cold War super- power tensions and rivalries, either Causes and Effects of Wars or 20th century Authoritarian States, and one other topic.

**Higher Level Coursework:** Students will also conduct their own independent historical investigation on a topic about which they feel passionate.

## IB Philosophy SL Y1-Y2

Course Codes: HS2145 (Y1), HS2146 (Y2)

Duration: Two years

Prerequisites: Grade 11 or Grade 12

Credits: 2.0



IB Philosophy is a subject that tackles questions important to humanity. For example, what is it to be a human being and how do I know what is the right thing to do? Students will learn how to think systematically, analyze arguments, and study philosophical themes. They will also be looking at problems facing contemporary society, including those resulting from increased international interaction. IB Philosophy covers major philosophical themes such as moral values, relativism, utilitarianism as well as major philosophical thinkers such as Plato, Socrates, Hegel and Iris Murdoch. Students will also look at questions such as: are human beings special? Are we free and are human beings naturally selfish? They will also get the chance to study an optional theme of your own choice.

This course will be taught online through Pamoja. Registration priority will be given to IB Diploma students. For more information visit: <http://www.pamojaeducation.com/IB-online-courses/>



**IB Environmental Systems & Society SL Y1-Y2**

Course Codes: HS4115 (Y1), HS4125 (Y2)

Duration: Two years

Prerequisites: Biology Lab Science

Credits: 1.0 Science credit (Y1), 1.0 Social Studies credit (Y2)

The prime intent of this course is to provide students with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed, personal response to the wide range of pressing environmental issues that they will inevitably come to face. Students' attention can be constantly drawn to their own relationship with their environment and the significance of choices and decisions that they make in their own lives. It is intended that students develop a sound understanding of the interrelationships between environmental systems and societies, rather than a purely journalistic appreciation of environmental issues. Students will be evaluating the scientific, ethical and socio-political aspects of issues. Field work and other experiential work will be an integral part of the course, some of which may be extended beyond the normal school schedule. As a trans-disciplinary course, IB Environmental Systems and Society is designed to combine the techniques and knowledge associated with the group 4 (experimental sciences) with those associated with group 3 (individuals and societies). Choosing to study this course as part of the IB diploma program allows students to satisfy the requirement for both groups 3 & 4 of the hexagon. This then allows students to choose another subject from any hexagon group (including another group 3 or 4 subject). At SAS, a student enrolled in the IB Environmental Systems and Society two year course will be awarded a science credit for year 1 and a social studies credit for year 2.

**IB Psychology SL/HL Y1-Y2**

Course Codes: HS2113 (SL Y1), HS2123 (SL Y2); HS2133 (HL Y1); HS2143 (HL Y2)

Duration: Two years

Prerequisites: Grade 11 or Grade 12

Credits: 2.0

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

IB Psychology takes a holistic approach that fosters intercultural understanding and respect. In the core of the IB Psychology course, the biological level of analysis demonstrates what all humans share, whereas the cognitive analysis reveal the immense diversity of influences that produce human behavior and mental processes. Cultural diversity is explored and students are encouraged to develop empathy for the feelings, needs and lives of others within and outside their own culture. This empathy contributes to an international understanding.

**Higher Level coursework:** Students enrolled in IB Psychology HL must complete:

- all three compulsory levels of analysis
- two options from a choice of five
- qualitative research methodology
- one simple experimental study

**IB Economics SL/HL Y1-Y2**

Course Codes: HS2113 (SL Y1), HS2123 (SL Y2); HS2134 (HL Y1); HS2144 (HL Y2)

Duration: Two years

Prerequisites: Grade 11 or Grade 12

Credits: 2.0

Economics is one of the pillars of modern society, the understanding of which is crucial for leaders in fields from politics to law and business. This course is designed to introduce economic concepts and theories and to develop the skills of economic reasoning and analysis. The course spans two years and will cover units including basic economic concepts, microeconomics, macroeconomics, international trade, and economic development. Students' grades will be based on a combination of internal assessments, such as article analyses, quizzes, unit tests, and research projects.

**Higher Level Coursework:** In addition to the content covered in IB Economics SL, the HL course adds a major area of study, Theory of the Firm, which many students find challenging. HL students also learn the basic mathematical calculations (Algebra 1 level of difficulty) related to the economic theories we study.

**IB Business Management SL/HL Y1-Y2**

Course Codes: HS2117 (SL Y1), HS2127 (SI Y2); HS2137 (HL Y1); HS2147 (HL Y2)

Duration: Two years

Prerequisites: Grade 11 or Grade 12

Credits: 2.0



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The Business Management course is a rigorous and dynamic course that explores how business decision-making processes are affected by, and have an impact on internal and external environments. The course covers:

- Business organisation and environment
- Human resources
- Accounting and finance
- Marketing
- Operations management

This course will be taught through Pamoja, an online IB curriculum provider. Registration priority will be given to IB Diploma students. For more information visit: <http://www.pamojaeducation.com/IB-online-courses/>

**Higher Level Coursework:** Each of the above units contain HL extension topics.

## IB Information Technology in a Global Society SL/HL Y1-Y2

Course Codes: HS2110 (SL Y1), HS2120 (SL Y2); HL HS2130 (HL Y1); HS2140 (HL Y2)

Duration: Two years

Prerequisites: Grade 11 or Grade 12

Credits: 2.0



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Information Technology in a Global Society looks at technological innovations and their social and ethical impact on the world today. It is focused on three main strands:

- Social and ethical significance
- Application to specified scenarios
- IT systems

This course will be taught online through Pamoja. Registration priority will be given to IB Diploma students. For more information visit: <http://www.pamojaeducation.com/IB-online-courses/>

**Higher Level Coursework:** The HL course covers 3 extension topics: IT systems in organizations; Robotics, artificial intelligence and expert systems; Information systems. It also requires the study of an annually issued case study.

## AP Capstone Seminar: Social Studies

Course Code: HS2208

Duration: Year

Prerequisites: Grade 10 or Grade 11

Credits: 1.0

This is foundational course of the AP Capstone Program provides students with opportunities to think critically and creatively, research, explore, pose solutions, develop arguments, collaborate, and communicate using various media. Students explore real-world issues through a cross-curricular lens and consider multiple points of view to develop deep understanding of complex issues as they make connections between these issues and their own lives. Students read articles, research studies, and foundational and philosophical texts; listen to and view speeches, broadcasts, and personal accounts; and explore artistic and literary works to gain a rich appreciation and understanding of issues. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP European History

Course Code: HS2201

Duration: Year

Prerequisites: Grade 11 or Grade 12

Credits: 1.0

The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

## AP US History

Course Code: HS2202

Duration: Year

Prerequisites: Asian History

Credits: 1.0

This intensive course covers the entirety of United States history, with a strong emphasis on preparation for the Advanced Placement exam. Strong English reading comprehension and writing skills are the primary requirements. This is considered a college-level course, taught at a college-level pace. This highly challenging course requires a great deal of self-motivation and independent learning. Thematically, the course will address the major historical and political questions of United States history. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Psychology

Course Code: HS2203

Duration: Year

Prerequisites: Grade 11 or Grade 12

Credits: 1.0

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of humans and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. This class is fast paced as there are fourteen units to be covered. There is a large amount of nightly reading and detailed vocabulary to grasp. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Economics

Course Code: HS2204

Duration: Year

Prerequisites: Grade 11 or Grade 12

Credits: 1.0

Advanced Placement Economics encompasses two full AP courses taken in succession: AP Microeconomics and AP Macroeconomics. The purpose of the course is to introduce students to economics – the study of how to best allocate scarce resources among unlimited wants. This rigorous course is taught at the college level; student's study habits and participation should reflect this. On average the course will cover one chapter from the textbook per week and it is expected that students complete and comprehend the content within the assigned time frame. Due to the college level content of this course it is taught at a fast pace, and students must be prepared for this. It is hoped that knowledge of economics will enhance students' perceptions of the world, and give them insights into people's behavior and decisions.

AP Microeconomics is focused on the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy.

AP Macroeconomics is focused on the principles of economics that apply to an economic system as a whole. Emphasis is placed on the study of national income and price-level determination, along with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Comparative Government & Politics

Course Code: HS2205

Duration: Year

Prerequisites: Grade 11 or Grade 12

Credits: 1.0

This course will provide students with the conceptual tools necessary to develop an understanding of some of the world's diverse political structures and practices. The course encompasses the study of both specific countries and their governments, as well as general concepts used to interpret the political relationships and institutions found in virtually all national politics. Six countries — Great Britain, Russia, China, Mexico, Iran, and Nigeria — form the core of the AP Comparative Government and Politics course. They are taught because they provide a foundation for developing an understanding of different types of political systems. The course is approached through the following six topics: methods of comparison; sovereignty, authority and power; political institutions; citizens, society, and the state; political and economic change; and public policy. All students enrolled in an AP subject must sit the external exam at the end of the school year.



# SCIENCE COURSES

## Science Department Flow Chart

Grade 9 students must enroll in:

Physics-Chemistry Lab Science

Grade 10 students must enroll in:

Biology Lab Science

Grade 11 students may choose any of the courses below based on meeting prerequisites:

AP Physics 1	Earth & Space Science*	AP Biology	Chemistry
IB Physics SL/HL (two-year course)	Independent Research & Design	IB Biology SL/HL (two-year course)	IB Chemistry SL/HL (two-year course)
	IB Environmental Systems & Society SL (two-year course) 1 credit Science 1 credit Social Studies	IB Sports, Exercise, & Health Science SL/HL (two-year course) 1 credit - Science 1 credit Elective	AP Chemistry

Grade 12 students may choose any of the courses below based on meeting prerequisites:

AP Physics 1	Earth & Space Science*	AP Biology	Chemistry
AP Physics C	Independent Research & Design	IB Environmental Systems & Society SL Y1 (if science graduation requirements have already been met)	AP Chemistry

\* Note: All students are required to take Earth & Space Science in grade 11 or 12 unless they enroll in a two year IB science course or a one year AP science course.

**Legend**

- AP course
- IB course
- SAS course

## Physics-Chemistry Lab Science

Course Code: HS4007

Duration: Year

Prerequisites: This course is for grade 9 students

Credits: 1.0

This lab science course focuses on the use of science and engineering practices to develop conceptual understandings in basic chemistry and physics. This course also explores cross-cutting concepts that unite the sciences and allow students to make connections beyond the sciences. Each student will also be required to complete an independent investigation or engineering design project that further explores an area of student interest with a physical science conceptual focus. This grade 9 lab science course is based on the Next Generation Science Standards and focuses on Physics and Chemistry.

## Biology Lab Science

Course Code: HS4008

Duration: Year

Prerequisites: This course is designed for grade 10 students.

Credits: 1.0

Biology is the scientific study of life. In this course we will embrace knowledge of life through scientific actions, such as: inquiry, development of models, laboratory investigations, data analysis and interpretation, mathematics, scientific argumentation, forming scientific explanations from evidence, and engaging in the scientific community through reading literature and communicating new ideas. The scientific skills that we practice and complete will not only allow us to discover biology content knowledge, but prepare us for the thinking needed to be an informed citizen and 21st century scientist.

The grade 10 Biological Lab Science course is based on the Next Generation Science Standards and focuses on the following units: Ecology, Evolution, Structure and Function, Genetics.

## Chemistry

Course Code: HS4004

Duration: Year

Prerequisites: Biology Lab Science

Credits: 1.0

This Chemistry course is a high school level chemistry course designed for students who will enter AP Chemistry the following year. The same units studied in the AP Chemistry course will be examined in this course. This course will address some of the simpler concepts in each of the AP units in order to lay a strong foundation for the AP course. Lab work will be at a strong high school level, and will teach students how to be scientific inquirers.



## Earth & Space Science

Course Code: HS4029

Duration: Year

Prerequisites: Biology Lab Science

Credits: 1.0

This Lab Science course focuses on the use of science and engineering practices to develop conceptual understandings in the earth and space sciences. This course also explores cross-cutting concepts that unite the sciences and allow students to make connections beyond the sciences. Each student will also be required to complete an independent investigation or engineering design project that further explores an area of student interest with an earth and/or space science conceptual focus.

## Independent Research & Design

Course Code: HS4207

Duration: Year

Prerequisites: Grade 11 student enrolled in another science course or a grade 12 student

Credits: 1.0

This course offers students of all levels an opportunity to perform authentic, science-focused research and design. Independent Research and Design reinforces and integrates skills learned in previous courses. This course provides students the opportunity explore topics of personal interest and is intended to stimulate students' ingenuity, curiosity, and intellectual talents. The students will use the scientific method and engineering design cycle to investigate, design, plan, and implement a research or design project. This course fosters awareness of the social and ethical implications of scientific and technological developments.

## IB Environmental Systems & Society SL Y1-Y2

Course Codes: HS4115 (Y1), HS4125 (Y2)

Duration: Two years

Prerequisites: Biology Lab Science

Credits: 1.0 Science credit (Y1), 1.0 Social Studies credit (Y2)

The prime intent of this course is to provide students with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed, personal response to the wide range of pressing environmental issues that they will inevitably come to face. Students' attention can be constantly drawn to their own relationship with their environment and the significance of choices and decisions that they make in their own lives. It is intended that students develop a sound understanding of the interrelationships between environmental systems and societies, rather than a purely journalistic appreciation of environmental issues. Students will be evaluating the scientific, ethical and socio-political aspects of issues. As a trans-disciplinary course, IB Environmental Systems and Society is designed to combine the techniques and knowledge associated with the group 4 (experimental sciences) and with those associated with group 3 (individuals and societies). Choosing to study this course as part of the IB diploma program allows students to satisfy the requirement for both groups 3 & 4 of the hexagon. This then allows students to choose another subject from any hexagon group (including another group 3 or 4 subject). At SAS, a student enrolled in the IB Environmental Systems and Society two year course will be award a science credit for year 1 and a social studies credit for year 2.

**IB Sports, Exercise, & Health Science SL/HL Y1-Y2**

Course Codes: 7030 (Y1), 7031 (Y2)

Prerequisites: Physical &amp; Health Education II

Duration: Two years

Credits: 1.0 Science (Y1), 1.0 Elective (Y2)

This two-year course aims to introduce students to some of the scientific components that make up the study of sport, exercise, and health. The diploma program course in Sports, Exercise, and Health Science involves the study of the science that underpins physical performance and provides the opportunity to apply these principles.

As stated in the IB guide, this course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology, and nutrition, which are studied in the context of sport, exercise, and health. Students will cover both core and option topics and carry out practical (experimental) investigations in both laboratory and field settings. This will provide an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyze human performance. Where relevant, the course will address issues of internationalism and ethics by considering sport, exercise, and health relative to the individual and in a global context.

**Higher Level Coursework:** Students at HL are required to study additional higher level (AHL) material, conduct extra hours in the lab, and cover further HL topics within the options. The distinction between SL and HL is one of breadth and depth. Additional units include further anatomy; the endocrine system; fatigue; friction and drag; skill acquisition and analysis; genetics and athletic performance, and exercise and immunity.

**IB Biology SL/HL Y1-Y2**

Course Codes: HS4110 (SL Y1), HS4120 (SL Y2); HS4130 (HL Y1); HS4140 (HL Y2)

Duration: Two years

Prerequisites: Biology Lab Science

Credits: 2.0

IB Biology is a Group 4 experimental science with subject specific core topics of: cell biology, molecular biology, genetics, ecology, evolution and human physiology plus one option chosen by the teacher. Options are selected from Neurobiology and Behavior, Biotechnology and Bioinformatics, Ecology and Conservation, and Human Physiology. All students will complete an independent laboratory investigation as their internal assessment.

**Higher Level Coursework:** Additional higher-level material includes further Nucleic Acids, Metabolism: Cell Respiration and Photosynthesis, Plant Biology, Genetics and Evolution, and Animal Physiology.

**IB Chemistry SL/HL Y1-Y2**

Course Codes: HS4111 (SL Y1), HS4121 (SI Y2); HS4131 (HL Y1); HS4041 (HL Y2)

Duration: Two years

Prerequisites: Biology Lab Science

Credits: 2.0

IB Chemistry is a group 4 experimental science that is separated into two levels, Standard (SL) and Higher (HL). Both levels share a common subject specific curriculum and a Group 4 project. The subject specific curriculum includes; Atomic theory, Periodic trends, Chemical bonding, Stoichiometry, Thermochemistry, Kinetics, Equilibrium, Acids and bases, Organic chemistry, Reduction and oxidation, Uncertainty in measurement and one "Option" which includes Materials, Energy, Biochemistry and Medicinal chemistry. The above curriculum will be taught using a variety of teaching methods including application of laboratory skills. In year two, the students will be using those laboratory skills as they conduct their own individual investigation called an internal assessment which will be externally assessed. The purpose of IB Chemistry is to engage students in the study of matter and how it changes and interacts with other matter. Students will see how Chemistry is called the central science because it has connections will all other areas of science.

**Higher Level Coursework:** The HL course will go into more depth and more rigor in each topic. Students in HL will be learning an additional 60 hours in all of the above subject specific curriculum except for stoichiometry. Students should expect more class time hours, and will also spend more time on homework. Additional HL material includes a more detailed and in-depth study of the special core topics.

**IB Physics SL/HL Y1-Y2**

Course Codes: HS4112 (SL Y1), HS4122 (SL Y2); HS4132 (HL Y1); HS4142 (HL Y2)

Duration: Two years

Prerequisites: Biology Lab Science; It is also strongly recommended that students have completed Algebra 2/Trigonometry.

Credits: 2.0

IB Physics Standard Level is designed for students who want an introduction of a wide variety of general physics topics over a two-year period. In the first year, the topics of measurement, errors, mechanics, waves, thermal physics, and energy, power, and an introduction to electricity will be covered. In the second year, electrical circuits, electromagnetism, atomic, nuclear and particle physics will be studied. An additional topic to study (Option) will be selected from relativity, engineering physics, imaging and astrophysics. Mathematical competence is essential for success in this course, although it is not essential to be enrolled in calculus or HL math courses.

**Higher Level Coursework:** IB Physics Higher Level (HL) is designed for students who want a greater depth and breadth of study in physics. IBO prescribes a minimum of 240 hours for this course. The first year of the HL course will cover topics from the common subject specific core and a Group 4 project. In the first year the topics of measurement, errors, mechanics, waves, thermal physics, and energy, power, and an introduction to electricity will be covered. In the second year, electrical circuits, electromagnetism, atomic, nuclear and particle physics will be studied, along with a revisit of first year topics and the addition of higher-level material (AHL). An additional topic to study (Option) will be selected from relativity, engineering physics, imaging and astrophysics.

## AP Biology

Course Code: HS4200

Duration: Year

Prerequisites: Biology Lab Science

Credits: 1.0

The AP Biology course is designed to help students develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, using models, justifying claims and connecting concepts in and across domains. The conceptual study of the course is based on the four following big ideas: 1) The process of evolution drives the diversity and unity of life; 2) Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis; 3) Living systems store, retrieve, transmit, and respond to information essential to life processes; 4) Biological systems interact, and these systems and their interactions possess complex properties. This AP Biology course is equivalent to a two-semester college introductory biology course. Every student enrolled in this course must sit the external exam at the end of the year.

## AP Chemistry

Course Code: HS4201

Duration: Year

Prerequisites: Biology Lab Science

Credits: 1.0

The AP Chemistry course is designed to be the equivalent of the general first year university chemistry course taken by college freshmen. A range of topics are covered, spanning physical and analytical chemistry. The major units in the course are centered around the 'Big Ideas' from the College Board. The units include:

- Introduction/Scientific Method
- Atomic Structure
- Periodicity
- Chemical Bonding and Properties
- Stoichiometry
- Thermochemistry
- Gases, Liquids, Solids
- Equilibrium
- Acids and Bases
- Kinetics
- Electrochemistry

Students will complete a range of college level laboratory experiments, a number of which will be inquiry based. Students are expected to take tangible responsibility for their learning with a large amount of work required outside of class in order to make the most of the time in class. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Physics 1

Course Code: HS4210

Duration: Year

Prerequisites: Successful completion of Algebra II with trigonometry and Biology Lab Science

Credits: 1.0

The AP Physics program provides a systematic study of the principles of physics and emphasizes the development of critical thinking and problem-solving ability. The course covers Newtonian mechanics including rotational dynamics and angular momentum, work, energy and power, mechanical waves and sound. It also introduces electric circuits. It is assumed that the student is familiar with algebra and basic trigonometry. This course offers the essential foundation in physics, preparing students for science-related courses. This course is also the prerequisite for AP Physics C. All students enrolled in an AP Subject must sit the external exam at the end of the school year.

## AP Physics C: Mechanics, Electricity & Magnetism

Course Code: HS4206

Duration: Year

Prerequisites: Completion Physics 1 and enrollment or completion of AP Calculus or IB Math HL. In addition, strong recommendations are required from both the Mathematics and Science department teachers.

Credits: 1.0

Although AP Calculus or IB Math HL can be taken concurrently, success in AP Physics C requires a strong background in Calculus. This yearlong course models the initial two semesters of calculus-based university physics required for science and engineering majors. Topics of study from Newtonian mechanics include:

- kinematics
- force, work, and energy
- systems of particles
- circular motion and rotation
- oscillations and gravitation

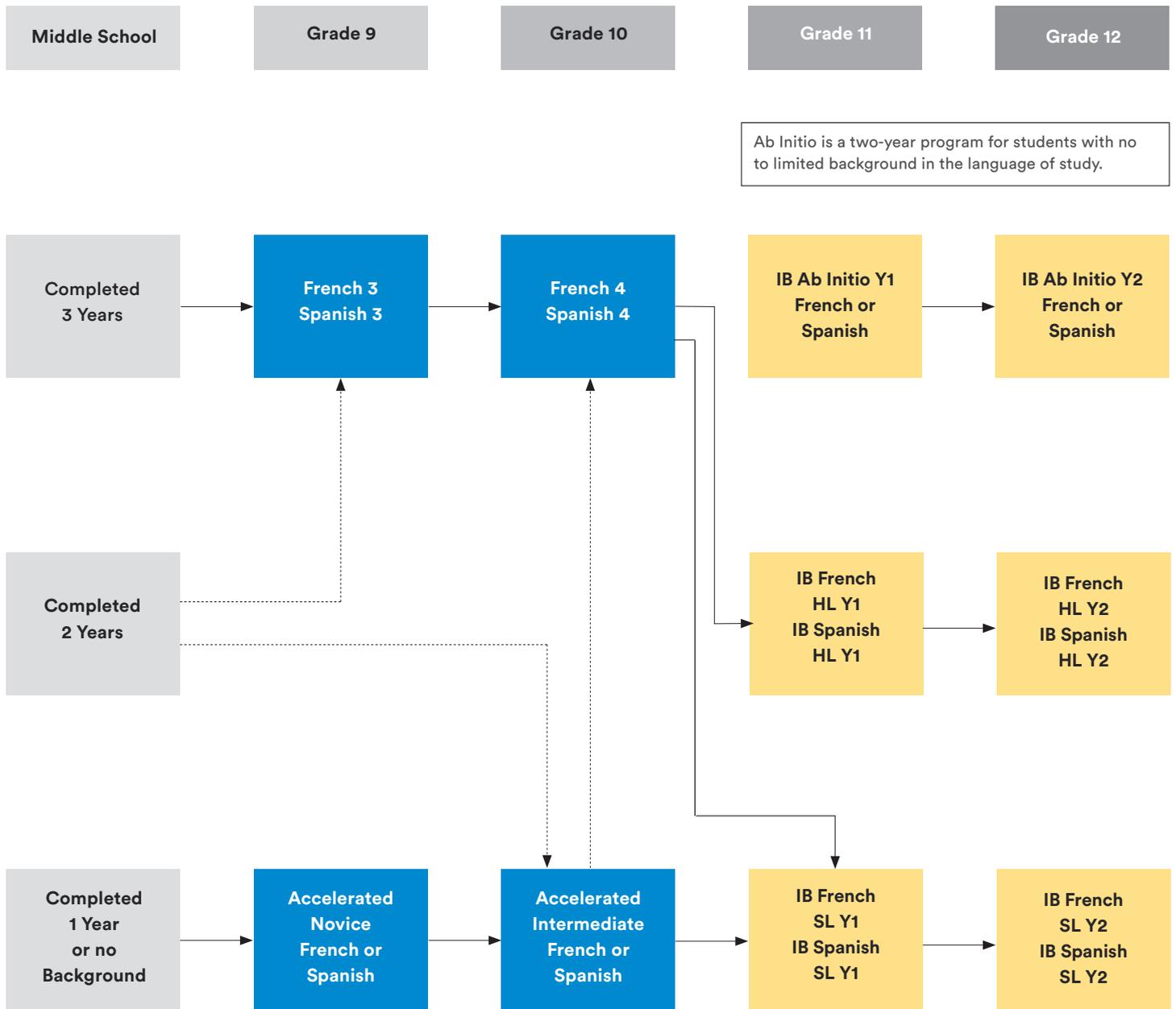
Electricity and Magnetism topics of study include:

- electrostatics
- conductors, capacitors, and dielectrics
- electric circuits
- magnetic fields
- electromagnetism

All students enrolled in this AP subject must sit both external exams at the end of the school year.

**GLOBAL LANGUAGES COURSES**

Global Languages Department Flow Chart



Ab Initio is a two-year program for students with no to limited background in the language of study.



**Legend**

- IB course
- SAS course

### Accelerated Novice French

Course Code: HS5052

Duration: Year

Prerequisites: None

Credits: 1.0

This course is for complete beginners and is fast paced, covering 3 semesters in two. Students will be introduced to vocabulary, grammar and culture across a wide range of familiar topics designed to quickly build their capacity. By the end of the course students will be able to hold a 5-minute conversation and write a 100-word text. Students will also be able to understand audio and written texts on familiar topics. Students will also be able to communicate in the past, present and future.

Because of the fast pace of this subject, you will need to spend substantial time learning new vocabulary.

### Accelerated Intermediate French

Course Code: HS5053

Duration: Year

Prerequisites: Accelerated Novice French or teacher recommendation

Credits: 1.0

This course is for those who have studied Accelerated Novice French or done at least 2 years in the Middle-School program. It is a fast-paced course designed to cover 3 semesters in two. Students will deepen their knowledge of vocabulary, grammar and culture and extend the range of tenses in which you can communicate. Students will begin to explore more abstract topics and themes in preparation for further study at IB level.

By the end of the course students will be able to hold a 7-minute conversation and write a 150-word text. Students will also be able to understand longer and more complex audio and written texts on familiar and more abstract topics. Students will be able to use several past and future tenses, together with the present tense.

### French 3

Course Code: HS5003

Duration: Year

Prerequisites: Accelerated Intermediate French or teacher recommendation

Credits: 1.0

The third year of French consolidates and reviews the skills, grammar and vocabulary learned up to this point, with a greater emphasis on language register and style, in a range of familiar and unfamiliar contexts. This course covers the remaining tenses and more complex grammatical patterns. It is also a continued study of Francophone cultures and basic French literature. By the end of the year, students will be capable communicators, who are able to converse in French on a variety of topics, take part in simple discussions or debates and write a minimum of 150 words for different purposes. Students will be assessed regularly with quizzes and tests, projects, reading and visual comprehension tasks, written compositions, oral presentations and conversations. Students completing this year will be able to go on to French IV or year one of IB French, Standard Level (or Higher level on teacher recommendation).

### French 4

Course Code: HS5004

Duration: Year

Prerequisites: French 3 or teacher recommendation

Credits: 1.0

This high intermediate course aims at developing the autonomy of students by extending the skills, grammar and vocabulary learned previously. It focuses on the consolidation of receptive, productive and interactive skills. It extends the intercultural competency through an exploration of Francophone cultures and French literature. The course uses a range of authentic resources (texts, interactive websites, songs, movies, etc.) in order to emphasize learning through various approaches and to give students opportunities to express themselves in an increasingly comfortable manner at a high intermediate level. By the end of the year, students will aim to be proficient communicators, who are able to understand and fluently communicate in French on a variety of topics and for a variety of purposes. Students will be assessed regularly with quizzes and tests, reading and listening comprehension tasks, as well as written and interactive oral productions. Students completing this course will be eligible to move into Year 1 of IB French B higher level.

### IB French B SL/HL Y1-Y2

Course Codes: HS5110 (SL Y1); HS5120 (SL Y2); HS5130 (HL Y1); HS5140 (HL Y2)

Duration: Two years

Prerequisites: French 3, French 4, and Accelerated Intermediate French for SL or teacher recommendation

Credits: 2.0

French B is a language acquisition course designed for students with some previous experience of the target language. In the language B course, students further develop their ability to communicate in French through the study of language, themes and texts. In doing so, they also develop conceptual understandings of how language works and international-mindedness through the study of the French language and Francophone cultures. At both levels of language B (SL and HL), students learn to communicate in French in familiar and unfamiliar contexts. They describe situations, narrate events, explain problems and support their personal opinions for a variety of purposes and on a variety of topics related to the five prescribed themes: Identities, Experience, Human ingenuity, Social organization and Sharing the planet. French B provides students with a basis for further study, work and leisure through the use of an additional language.

Students will be assessed regularly with quizzes and tests, reading and listening comprehension tasks, as well as individual written and oral productions. At the end of the second year, students will sit the externally assessed IB exams.

**Higher Level Coursework:** The study of two literary works originally written in French. The distinction between language B SL and HL can also be seen in the level of competency the student is expected to develop in the receptive, productive and interactive skills.

## IB French Ab Initio SL Y1-Y2

Course Codes: HS5151 (Y1), HS5152 (Y2)

Duration: Two years

Credits: 2.0

The *Ab Initio* program is an intensive language course that covers the equivalent of three years of French over the course of two years and is then assessed externally through the IB exam. It is meant for students who have no previous experience of learning the language. The program meets the needs of those IB students who have had little or no opportunity for foreign language study in their earlier education and are interested in learning a new foreign language as part of their IB Diploma. The aims of this course are to develop students' ability to communicate in speech and in writing in order to enable them to deal adequately with familiar and practical needs; introduce students to the culture of the countries where the language is spoken through the study of the target language; provide students with a foundation for further study of the target language; provide enjoyment and intellectual stimulation; and encourage positive attitudes towards the learning of other languages and their speakers and countries. This course is organized into three themes: individual and society, leisure and work, and urban and rural environment.

## Accelerated Novice Spanish

Course Code: HS5050

Duration: Year

Credits: 1.0

This course is for complete beginners and is fast paced, covering 3 semesters in two. Students will be introduced to vocabulary, grammar and culture across a wide range of familiar topics designed to quickly build their capacity. By the end of the course students will be able to hold a 5-minute conversation and write a 100-word text. Students will also be able to understand audio and written texts on familiar topics. Students will be able to communicate in the past, present and future.

Because of the fast pace of this subject, students will need to spend substantial time learning new vocabulary.

## Accelerated Intermediate Spanish

Course Code: HS5051

Duration: Year

Prerequisites: Accelerated Novice Spanish or teacher recommendation

Credits: 1.0

This course is for those who have studied Accelerated Novice Spanish or done at least 2 years in the Middle-School program. It is a fast-paced course designed to cover 3 semesters in two. Students will deepen their knowledge of vocabulary, grammar and culture and extend the range of tenses in which they can communicate. Students will begin to explore more abstract topics and themes in preparation for further study at IB level.

By the end of the course students will be able to hold a 7-minute conversation and write a 150-word text. Students will also be able to understand longer and more complex audio and written texts on familiar and more abstract topics. Students will be able to use several past and future tenses, together with the present tense.

## Spanish 3

Course Codes: HS5007

Duration: Year

Prerequisites: Accelerated Intermediate Spanish or teacher recommendation

Credits: 1.0

This course consolidates content and grammar taught in previous levels and extends the range of tenses and other aspects of Spanish grammar leading to a more in-depth appreciation of Hispanic culture. By the end of the course, students will have read a short story and be able to hold a 7-minute conversation and write a minimum of 150 words on a familiar topic. They will also be able to understand more complex audio files and written texts. Students completing this year will be able to go on to Spanish IV or year one of IB Spanish Standard Level (or Higher level on teacher recommendation).

## Spanish 4

Course Code: HS5008

Duration: Year

Prerequisites: Spanish 3 or teacher recommendation

Credits: 1.0

This is a course aimed at preparing students for the IB program. Therefore, the course will be designed into thematic units, each one with its own vocabulary and a mini-lesson on grammar. Students' participation is expected. The course will include a reading and writing component in order to facilitate students' growth in the language. Students completing this course will be eligible to move into Year 1 of IB Spanish B higher level.

## IB Spanish Ab Initio SL Y1-Y2

Course Codes: HS5155 (Y1), HS5156 (Y2)

Duration: Two years

Prerequisites: None

Credits: 2.0

The *Ab Initio* program is an intensive language course that covers the equivalent of three years of Spanish over the course of two years and is then assessed externally through the IB exam. It is meant for students who have no previous experience of learning the language. The program meets the needs of those IB students who have had little or no opportunity for foreign language study in their earlier education and are interested in learning a new foreign language as part of their IB Diploma. The aims of this course are to develop the student's ability to communicate, in speech and in writing, in order to enable them to deal adequately with familiar and practical needs; introduce students to the culture of the countries where the language is spoken through the study of the target language; provide students with a foundation for further study of the target language; provide enjoyment and intellectual stimulation; and encourage positive attitudes towards the learning of other languages and their speakers and countries. This course is organized into three themes: individual and society, leisure and work, and urban and rural environment.



## IB Spanish B SL/HL Y1-Y2

Course Codes: HS5111 (SL Y1); HS5121 (SL Y2); HS5131 (HL Y1); HS5141 (HL Y2)

Duration: Two years

Prerequisites: Spanish 3, Spanish 4 or teacher recommendation. Accelerated Intermediate Spanish for SL

Credits: 2.0

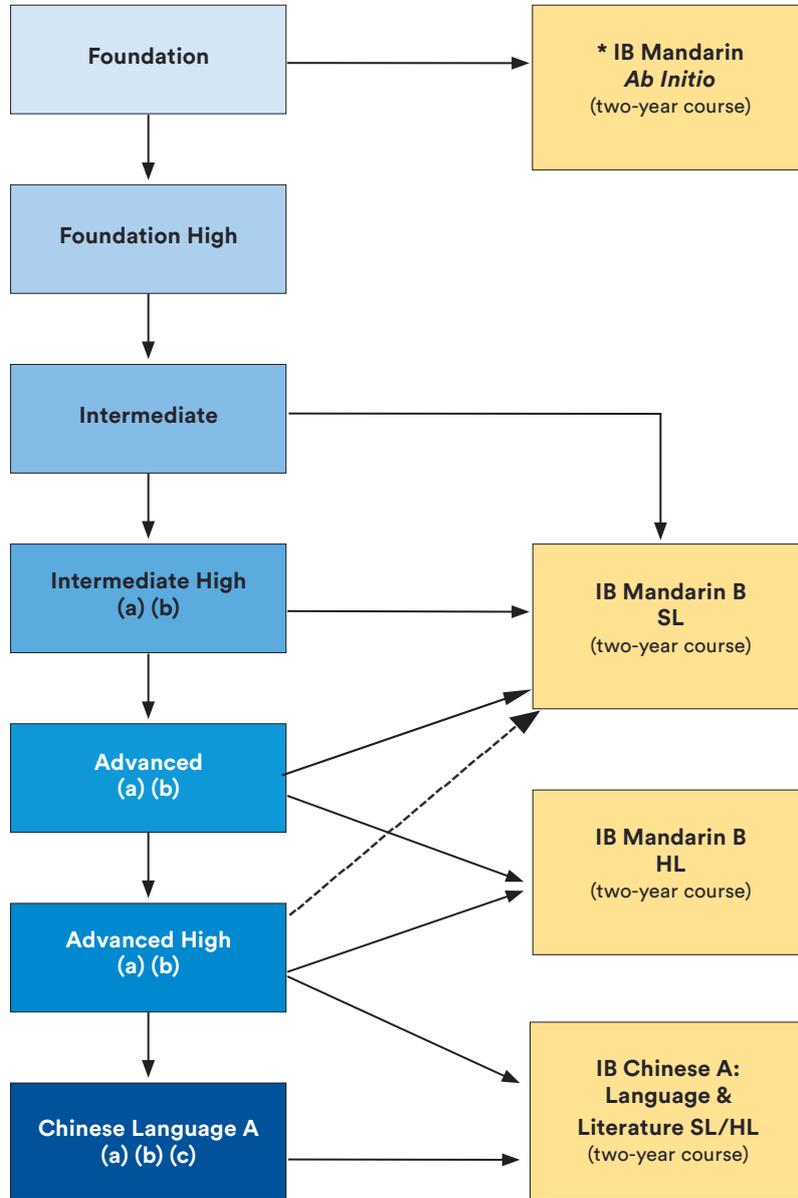
Spanish B is a language acquisition course designed for students with some previous experience of the target language. In the language B course, students further develop their ability to communicate in Spanish through the study of language, themes and texts. In doing so, they also develop conceptual understandings of how language works and international-mindedness through the study of the Spanish language and Hispanic cultures. At both levels of language B (SL and HL), students learn to communicate in Spanish in familiar and unfamiliar contexts. They describe situations, narrate events, explain problems and support their personal opinions for a variety of purposes and on a variety of topics related to the five prescribed themes: Identities, Experience, Human ingenuity, Social organization and Sharing the planet. Spanish B provides students with a basis for further study, work and leisure through the use of an additional language. Students will be assessed regularly with quizzes and tests, reading and listening comprehension tasks, as well as individual written and oral productions. At the end of the second year, students will sit the externally assessed IB exams.

**Higher Level Coursework:** The study of two literary works originally written in Spanish. The distinction between language B SL and HL can also be seen in the level of competency the student is expected to develop in the receptive, productive and interactive skills.



**CHINESE LANGUAGE COURSES**

Chinese Department Flow Chart



Note: Full IB Diploma students will be recommended for placement into Mandarin B or Chinese Language A depending on their proficiency level. Students may then choose between taking their recommended course at the standard or higher level.

**Legend**

- IB course
- SAS course

\* This course will be taught online through Pamoja.

**Chinese Language Proficiency Level  
for External Assessments**

**IB Chinese A:  
Language &  
Literature SL/HL**

**IB Mandarin B  
HL**

**IB Mandarin B  
SL**

**AP Chinese and  
Culture**

**IB Mandarin  
*Ab Initio***



There is no formal Advanced Placement (AP) course being offered in the SAS Chinese program. We have limited capacity for the exam through Student Independent Study. Students who have attained Intermediate High level are the priority candidates to take the exams, as some AP material and similar themes are covered in that class.

Students in Advanced Chinese may also take the AP Chinese exam if there is room and upon recommendation from their Chinese teacher.

The AP Chinese exam is not appropriate for students whose Chinese level is already higher than that of the exam (Advanced High or above).

**Foundation Chinese**

Course Code: HS5024

Duration: Year

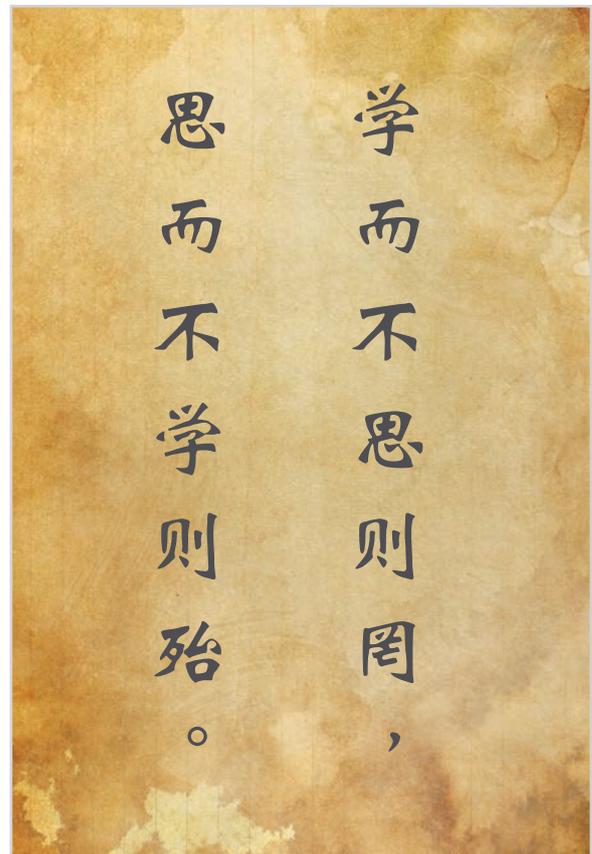
Prerequisites: None

Credits: 1.0

This course is designed for students who have no (or little) prior experience of learning Chinese. This one-year course aims to help students build up a very basic communicative competence in Chinese. Students will be able to communicate information in a limited range of everyday situations related to the topics covered in the Foundation course, including greetings, personal details, daily routine, food and drink, shopping, sports, transportation, and weather. At the end of the course, students will be expected to demonstrate the ability to:

- Make simple statements describing family members, everyday routines, and weather.
- Recognize 150-250 Chinese words; read texts of 100-150 words in length and answer simple questions related to the text.
- Write 100–150 words, with the ability to write texts of 60-80 words in length using simple phrases and sentences.
- Understand the similarities and differences between languages by comparing and contrasting Chinese culture with their own cultures.

Assessments will be conducted with a standards-based, criterion-referenced approach and through a variety of methods, such as: dialogue, role-play, presentation, reading comprehension test, and written productions. These assessments will be used to evaluate students' performance as well as to facilitate their learning.



## Foundation Chinese High

Course Code: HS5025

Duration: Year

Prerequisites: Foundation Chinese or equivalent level of communicative skill in Chinese

Credits: 1.0

This course is designed for students who have studied the Foundation course or have the equivalent level of communicative skills in Chinese. This one-year course aims to help students build up the basic communicative competence of Chinese. Students will be able to communicate information in a range of everyday situations related to the topics covered in the Foundation High course, including food and drink, education, physical health, shopping, relationship, employment, entertainment, neighborhood and holidays. At the end of the course, students will be expected to demonstrate the ability to:

- Describe personal experiences and exchange ideas about topics of personal interest and everyday situations.
- Recognize 300-350 Chinese words; read text consisting of 150-200 words in length and answer questions about the main ideas and supporting details of the text.
- Write 200-250 words; write text consisting of 100-120 Chinese words in length about a familiar situation using different text types, such as postcards, letters, and emails.
- Understand the similarities and differences between languages by comparing and contrasting Chinese culture with their own cultures.

Assessments will be conducted with a standards-based, criterion-referenced approach and through a variety of methods, such as: dialogue, role-play, presentation, reading comprehension test, and written productions. These assessments will be used to evaluate students' performance as well as to facilitate their learning.

## Intermediate Chinese

Course Code: HS5026

Duration: Year

Prerequisites: Foundation High Chinese or equivalent level of communicative skill in Chinese

Credits: 1.0

This course is designed for students who have studied the Foundation High course or have the equivalent level of communicative skills in Chinese. This one-year course aims to help students build up an intermediate level of communicative competence in Chinese. Students will be able to handle a variety of uncomplicated communicative tasks in straightforward social situations, although conversation is generally limited to those predictable and concrete exchanges necessary for survival in Chinese culture. Intermediate Chinese will cover a range of topics: personal details, media, environment, physical health, employment, and technology. At the end of the course, students will be expected to demonstrate the ability to:

- Express thoughts, ideas and opinions through discussion with others about topics of personal interest, pertinent to everyday life and some social situations.
- Recognize 500-600 Chinese words; read text consisting of 200-300 Chinese words in length and comprehending specific information, ideas, opinions and attitudes.
- Write 350-450 words; write text consisting of 150-220 Chinese words in length; write short narratives or recounts and express thoughts, ideas and opinions.

- Understand the similarities and differences between languages by comparing and contrasting Chinese culture with their own culture.

Assessments will be conducted with a standards-based, criterion-referenced approach and through a variety of methods, such as: dialogue, role-play, presentation, reading comprehension test, and written productions. These assessments will be used to evaluate students' performance as well as to facilitate their learning.

## Intermediate High Chinese (a)

Course Code: HS5027B

Duration: Year

Prerequisites: Intermediate Chinese or equivalent level of communicative skill in Chinese

Credits: 1.0

This course is designed for students who have studied the Intermediate course or have the equivalent level of communicative skills in Chinese. Intermediate High is a two-year course that aims to help students build up communicative competence and become a capable communicator in Chinese. Students will be able to converse with ease and confidence when dealing with the routine tasks and social situations. At the end of the course, students will be expected to demonstrate the ability to:

- Express thoughts, ideas and opinions in a discussion with others about topics of social and some of global significance.
- Recognize 700-900 Chinese words; read text consisting of 300-450 Chinese words in length and interpret specific information, ideas, opinions and attitudes.
- Write 500-600 Chinese words; write text consisting of 250-400 Chinese words in length, using different text types, such as book report, review, simple cause/effect essay, newspaper article to expresses thoughts and explains reasons.
- Understand the similarities and differences between languages by comparing and contrasting Chinese culture with their own culture.

Assessments will be conducted with a standards-based, criterion-referenced approach and through a variety of methods, such as: dialogue, role-play, presentation, reading comprehension test, and written productions. These assessments will be used to evaluate students' performance as well as to facilitate their learning.

## Advanced Chinese (a)

Course Code: HS5028B

Duration: Year

Prerequisites: Intermediate High Chinese or equivalent level of communicative skill in Chinese

Credits: 1.0

This course is designed for students who have studied the Intermediate High course or have the equivalent level of communicative skills. Advanced is a two-year course that aims to help students build up communicative competence and become a proficient communicator in Chinese. Students will be able to handle a variety of communicative tasks in most informal and some formal conversations. At the end of the course, students will be expected to demonstrate the ability to:

- Engage in discussion about topics of society and some of global significance; share ideas, reflection and opinion in paragraph format with ease.

- Recognize 1400-1600 Chinese words; read text consisting of 500-600 Chinese words in length, and interpret specific information, ideas, opinions and attitudes.
- Write 800-1200 Chinese words; write text consisting of 400-500 Chinese words in length using different text types, including book report, review, simple cause/effect essay, newspaper article to express thoughts and explains reasons.
- Understand the similarities and differences between languages by comparing and contrasting Chinese culture with their own culture.

Assessments will be conducted with a standards-based, criterion-referenced approach and through a variety of methods, such as: dialogue, role-play, presentation, reading comprehension test, and written productions. These assessments will be used to evaluate students' performance as well as to facilitate their learning.

### Advanced High Chinese (a)

Course Code: HS5029B

Duration: Year

Prerequisites: Advanced Chinese or equivalent level of communicative skill in Chinese

Credits: 1.0

This course is designed for students who have studied the Advanced course or have the equivalent level of communicative skills. Advanced High is a two-year course that aims to help students build up communicative competence and become a proficient communicator in Chinese. Students will be able to handle with ease and confidence a large number of communicative tasks. At the end of the course, students will be expected to demonstrate the ability to:

- Engage in conversation about topics related to social and global significance; follow a lecture, a film or a book and synthesize the perspectives of the author.
- Recognize 1800-2000 Chinese words; read text of consisting 600-700 Chinese words in length; interpret specific information, ideas, opinions and attitudes.
- Write 1000-1500 Chinese words; write text consisting of 500-600 words in length using different text types, including book report, review, simple cause/effect essay, and newspaper article.
- Understand the similarities and differences between languages by comparing and contrasting Chinese culture with their own culture.

Assessments will be conducted with a standards-based, criterion-referenced approach and through a variety of methods, such as: dialogue, role-play, presentation, reading comprehension test, and written productions. These assessments will be used to evaluate students' performance as well as to facilitate their learning.



### Chinese Language A (a)

Course Code: HS5030C

Duration: Year

Prerequisites: Advanced High Chinese or equivalent level of communicative skill in Chinese

Credits: 1.0

This course is designed for students who have experience using Chinese in an academic context and will support their future academic study in Chinese by developing a high social, aesthetic and cultural literacy as well as effective communicative skills. Language A course is a three-year course and comprises four parts — two relate to the study of language and two to the study of literature. The focus of the Language A course is directed towards developing skills of textual analysis and literary criticism, as well as an awareness of how literary and non-literary texts convey meaning. The aims of teaching and studying the Language A course are to enable students to:

- Develop the skills involved in listening, speaking, reading and writing in a variety of contexts.
- Explore and analyze aspects of personal, host and other cultures through literary and non-literary works.
- Engage with information and communication technology in order to explore language.
- Develop critical, creative and personal approaches to studying and analyzing literary and non-literary works.

Assessments will be conducted with a standards-based, criterion-referenced approach and through a variety of methods, such as: dialogue, role-play, presentation, reading comprehension test, and written productions. These assessments will be used to evaluate students' performance as well as to facilitate their learning.

### IB Mandarin B SL/HL Y1-Y2

Course Codes: HS5113 (SL Y1), HS5123 (SL Y2), HS5133 (HL Y1), HS5143 (HL Y2)

Duration: Two years

Prerequisites: 2 to 5 years of academic Chinese

Credits: 2.0

IB Mandarin B SL course is a language acquisition course designed for students with some previous experience of the target language. In the language B course, students further develop their ability to communicate in Mandarin through the study of language, themes and texts. In doing so, they also develop conceptual understandings of how language works and international-mindedness through the study of the Mandarin language and Chinese cultures. The emphasis of the course will be on the development of the four primary language skills of listening, speaking, reading, and writing through a variety of texts, topics, and materials.

In this course, students learn to communicate in Mandarin in familiar and unfamiliar contexts. They describe situations, narrate events, explain problems and support their personal opinions for a variety of purposes and on a variety of topics related to the five prescribed themes: Identities, Experience, Human ingenuity, Social organization and Sharing the planet. IB students are required to sit the external exam at the end of year 2.

**Higher Level Coursework:** The study of two literary works originally written in Mandarin. The distinction between language B SL and HL can also be seen in the level of competency the student is expected to develop in the receptive, productive and interactive skills.

**IB Chinese A: Language & Literature SL/HL Y1-Y2**

Course Codes: HS5114 (SL Y1), HS5124 (SL Y2); HS5134 (HL Y1); HS5144 (HL Y2)

Duration: Two years

Prerequisites: 2 to 5 years of academic Chinese and instructor's approval

Credits: 2.0

IB Chinese A: Language and Literature HL is a two-year course that examines both traditional and nontraditional texts. The course will include, but is not limited to:

- A study of rhetoric and the impact of language use beyond that of literary analysis.
- An exploration of the connections between language and power, language and culture, and language and mass communication.
- Recognition of the importance of a writer's world and audience.
- Recognition of the impact of a reader's context on (multiple) readings of a text.
- Preparation for university-level writing for a variety of majors.

Since this course will study literary and non-literary texts, it best suits students who love literature and are interested in thinking about language in new ways.

**Higher Level Coursework:** In addition to studying additional topics and reading additional texts, HL students are required to submit one additional written task for the external IBO assessment. Two of the IBO assessment tasks for HL are more demanding than those of SL. The external assessment criteria require that HL students show a deeper understanding of content and demonstrate the ability to write a comparative analysis of texts.

**IB Mandarin *Ab Initio* SL Y1-Y2**

Course Codes: HS5159 (Y1), HS5150 (Y2)

Duration: Two years

Prerequisites: None

Credits: 2.0

This is a two-year course for students to achieve communicative competence in a variety of everyday situations. The objective of the course is clear and effective communication through the understanding and usage of a range of essential spoken and written forms of the language. The main focus of the course is on the acquisition of language for purposes and situations in everyday social interaction. While speaking and listening skills are emphasized, reading and writing skills are required as well. Aspects of the everyday life and culture of the Chinese speaking communities will be explored. The students are required to sit the both internal and external exam at the end of year 2.

This course will be taught online through Pamoja. For more information about this course, visit the Pamoja website: <http://www.pamojaeducation.com/IB-online-courses/mandarin-ab-initio.asp>



# VISUAL ARTS COURSES

## Visual Arts Department Flow Chart

Grade 9 students may take:

Art Lab

Innovation Institute students will take:

Creativity & Design  
(Grade 9)

Grade 10 students may choose any of the courses below based upon meeting prerequisites.

Innovation Institute students will take:

Art Lab

2D & 3D Design

Innovation & Design  
(Grade 10)

Art Coded

Intermediate Art Studio

Digital Studio

Grade 11 and 12 students may choose any of the courses below based on meeting prerequisites:

Art Foundation

2D & 3D Design

Digital Studio

Intermediate Art Studio

IB Film SL/HL  
(two-year course)

Advanced Art Studio

IB Visual Art SL/HL  
(two-year course)

**Legend**

- IB course
- SAS course

## Artlab

Course Code: HS6205

Duration: Year

Prerequisites: None

Credits: 1.0

This is not your typical introductory art course. Artlab is a place of experimentation and creativity. It is a place where we learn to see the world in a new way, try new things and hone our craft into meaningful artwork. In the lab, we'll paint with a brush, but we'll also paint with a stylus. We'll sculpt, build and cut with our hands, but we'll also use 3D printers, laser cutters, and the most important tool - your imagination. Each unit will allow students to learn how to generate and develop ideas and artwork, increase their knowledge and understanding of movements and artists, and learn how to analyze, respond and become inspired. Sketchbooks, projects and class critiques will support the development of critical thinking and creativity skills. This course is a recommended prerequisite for all future art courses. Artlab: Imagine. Craft. Build.

## Art: Coded

Course Code: HS6050

Duration: Year

Prerequisites: One previous art course

Credits: 1.0

Learn how to integrate computers, electronics, motors, LEDs and code to create interactive art projects. This course will utilize the tools in the MakerSpace and Fablab and a variety of electromechanical and software devices to create works of art. Not only will students be learning how to code and use circuits, they will also be developing their art skills by using a variety of traditional and nontraditional medium. Each project created in this class will be developed utilizing a sketchbook to develop an artist process. The projects will have specific goals and objectives to include specific concepts as students obtain more skills; however all projects will allow individual creativity to interpret the project where the student's inspiration leads.

## Creativity & Design

Course Code: HS6050

Duration: Year

Prerequisites: This course is only open to Innovation Institute Grade 9 students.

Credits: 1.0

This course is intended for Grade 9 students in the Innovation Institute program who want to learn the necessary tools that develop creative thinking and technical art making skills. In this course, we will examine where creativity comes from, how to generate and refine conceptual ideas and how to apply these processes towards a variety of interdisciplinary projects and challenges. Students will learn to analyze and deconstruct complex ideas and images in art, design, and media. Through various digital and traditional media projects, students will learn ways to improve their creativity, critical thinking, communication, collaboration, time management abilities, and develop traditional media, digital and design skills.

## Innovation & Design

Duration: Year

Prerequisites: This course is only open to Innovation Institute Grade 10 students.

Credits: 1.0

This course allows Grade 10 students in the Innovation Institute program to build on skills developed in Creativity and Design and introduces them to new forms of contemporary media and art making.

Students will analyze contemporary media and develop the skills to create effective forms of communication in both still (photography, graphic design) and moving images. Students will consider the importance of the integration of arts into STEM disciplines through design and creative thinking, in order to improve functionality and communication of meaning. To this end, students will learn how to build and test electronic circuits and create controllable electromechanical devices.

## Intermediate Art Studio

Course Code: HS6207

Duration: Year

Prerequisites: Artlab or Creativity & Design or permission from the teacher

Credits: 1.0

This course is intended for students who are interested in deepening their exploration of different art techniques, media and ideas. In order to help students become more thoughtful and skilled artists, projects will emphasize both technical skill development as well as conceptual problem solving skills. The year is comprised of both teacher and student directed assignments. Students will explore a variety of 2-D and 3-D media and techniques. Students will use sketchbooks to develop their visual ideas, to research the context of art-making, both historical and contemporary, and for personal reflection.

## Advanced Art Studio

Course Code: HS6208

Duration: Year

Prerequisites: Two years of art courses

Credits: 1.0

Advanced Art Studio is intended for students who are interested in pursuing their artwork independently, without the formality of an external exam. This course is both theme-based and student lead. Over the course of the year, teacher initiated themes with open media choice progress towards independent student lead projects. Students will utilize sketchbooks to help in the development of their ideas. The format of Advanced Art Studio will allow for the creation of a personal portfolio of artwork in a wide variety of media, which may be used to apply to university or just for fun! This course will help students develop a personal sense of who they are as an artist. This course may be taken for multiple years.

## 2D & 3D Design

Course Code: HS6209

Duration: Year

Prerequisites: None

Credits: 1.0

Design principles, visual art elements, and creative thinking processes are the basic building blocks of any creative endeavor. Through a hands on investigation of these concepts, students will deepen their understanding of the role of design in art and culture. Through the use of cutting edge digital software and MakerSpace and FabLab equipment, students will construct a variety of 2D and 3D design pieces. Through these iterative projects, students will explore not only the function and purpose these forms of communication, but also the fundamentals of graphic design. In addition, students will use various thinking strategies and design techniques and methods in order to improve their creative, analytical, and technical skills.

**IB Visual Art SL/HL Y1-Y2**

Course Codes: HS6110 (SL-Y1); HS6120 (SL-Y2); HS6130 (HL-Y1); HS6140 (HL-Y2)

Duration: Two years

Prerequisites: None

Credits: 1.0

IB Visual Art is intended for students who have a serious interest in the visual arts, and possess a high level of commitment to studio and written work. This two-year course requires students to investigate theoretical, art making, and curatorial practices. In order to be successful, students are expected to create an in-depth and personal body of work developed through an independent exploration of artists, ideas, materials and techniques. Students will generate and refine their ideas through the use of visual journals called a Process Portfolio. These journals require a dedication to and documentation of personal research and the exploration of media, technical skills, and the analysis of thematic, cultural, historical, aesthetic issues related to art. IB art students are also expected to create a comparative study in which they analyze, compare, and contrast works by self-selected artists. This research should impact on the student's development as an artist, as well as their art making practices.

This course of study ends with the completion of a written final comparative study, a written process portfolio and an individual exhibition in which students produce and curate a body of work completed over the two years. The work is examined externally by IB.

Please see below for requirements.

**Standard Level Coursework:**

Process Portfolio: SL students submit 9–18 screens which document their creative process.

Comparative Study: SL students will submit 10–15 screens which examine and compare at least three artworks.

Final Exhibition: SL students will exhibit 4-7 final pieces.

**Higher Level Coursework:**

Process Portfolio: HL students submit 13–25 screens which document their creative process.

Comparative Study: HL students submit 10–15 screens which examine and compare at least three artworks. HL students submit 3–5 additional screens which analyze the extent to which their work and practices have been influenced by the art and artists examined.

Final Exhibition: HL students will exhibit 8-11 final pieces.

**Digital Studio**

Course Code: HS8001

Duration: Year

Prerequisites: Art Foundation or Creativity &amp; Design is recommended

Credits: 1.0

The digital studio class will help students begin a journey in an exploration of photography and film. Through these two lens based art forms, students will learn creative ways to produce images that captivate an audience, tell an interesting visual story or even send a powerful message. This class will teach students how to use a Digital Single Lens Reflex camera in order to produce both still and moving images. Students will explore how to achieve quality images through an effective use of lights and lenses and composition. Topics such as light painting, capturing motion and digital imaging and retouching will be covered in the photography portion of the class. In the film portion of the class, students will learn about the fundamentals of film-making. Basic shot types, camera movements, sound and video editing will be explored.

**IB Film SL/HL Y1-Y2**

Course Codes: HS8165 (SL Y1); HS8175 (SL Y2); HS8185 (HL Y1); HS8195 (HL Y2)

Duration: Two years

Prerequisites: None

Credits: 2.0

Film literacy is a critical skill for the 21st century in which most of the media that we consume and produce is delivered in this fashion. Throughout the two year IB Film HL course, we will analyze how meaning is created and communicated in film language. We will study popular films, independent films, foreign films, and classic films. After we deconstruct these films down to their basic structures, we'll use those building blocks to make our own powerful films that tell engaging stories. In SL, we will be working towards three different assessments in year two. These include a close textual analysis of a film, a comparative study of two films in a topic of your choosing, a production portfolio of your work in different film roles.

**Higher Level Coursework:** In HL, we will be working towards four different assessments in year two. These include a close textual analysis of a film, a comparative study of two films in a topic of your choosing, a production portfolio of your work in different film roles, and a collaborative final film.



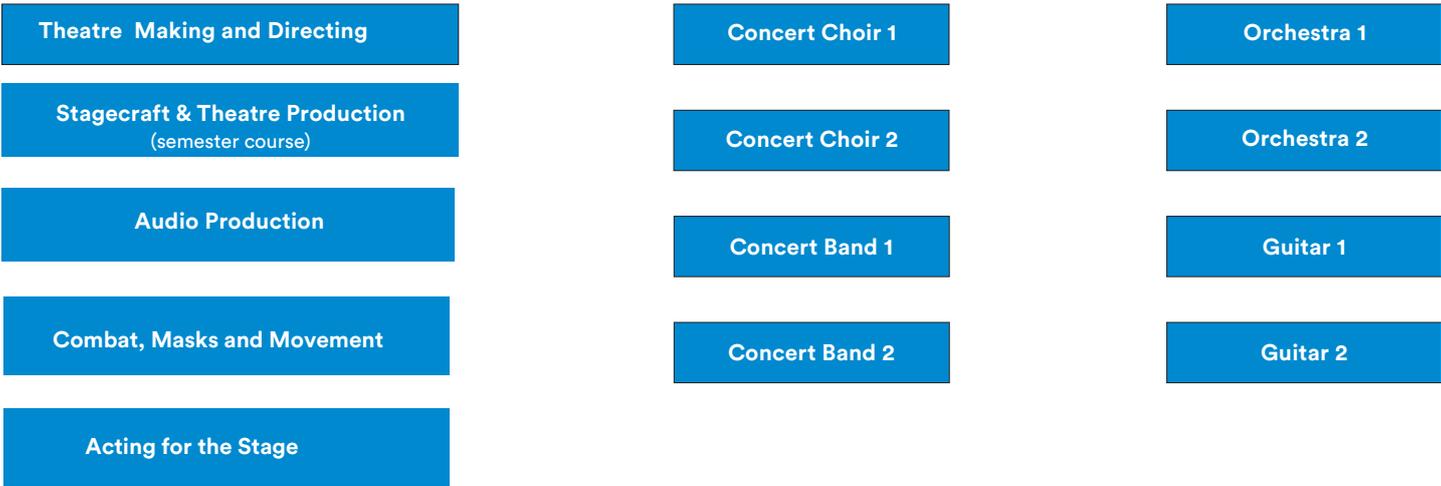
**PERFORMING ARTS COURSES**

**Performing Arts Department Flow Chart**

Grade 9 students may choose the course below based on meeting prerequisites:



Grade 10 students may choose any of the courses below based on meeting prerequisites:



Grade 11 and 12 students may choose any of the courses below based on meeting prerequisites:



**Legend**

- IB course
- SAS course

**Concert Choir 1**

Course Code: HS6020

Duration: Year

Prerequisites: None. Concert Choir 1 can be taken more than once.

Credits: 1.0

Concert choir is a performing group open to any student who can demonstrate an ability to match pitch and stay on a part. Choral literature of three to four parts, from the Renaissance to the present, is rehearsed and performed. Students will develop skills in vocal production, note and rhythm reading, listening, and conducting. Pianists are encouraged to audition for the accompanist role.

**Concert Choir 2**

Course Code: HS6021

Duration: Year

Prerequisites: Teacher placement. Concert Choir 2 can be taken more than once.

Credits: 1.0

Concert choir is a performing group open to any student who can demonstrate an ability to match pitch and stay on a part. Choral literature of three to four parts, from the Renaissance to the present, is rehearsed and performed. Students will develop skills in vocal production, note and rhythm reading, listening, and conducting. Pianists are encouraged to audition for the accompanist role.

**Concert Band 1**

Course Code: HS6022

Duration: Year

Prerequisites: One year previous experience required. Concert Band 1 can be taken more than once.

Credits: 1.0

Concert Band 1 (Intermediate) is open to all woodwind, brass, and percussion players who have at least one year of experience on their chosen instrument. Specific instrumental technique, ensemble skills, theoretical literacy, and historical awareness will be developed through the performance of a variety of Concert Band literature. This ensemble will build upon previous band experiences.

**Concert Band 2**

Course Code: HS6023

Duration: Year

Prerequisites: Teacher placement. - Concert Band 2 can be taken more than once.

Credits: 1.0

Concert Band 2 is open to experienced woodwind, brass, and percussion players. Specific instrumental technique, ensemble skills, theoretical literacy, and historical awareness will be developed through the performance of a variety of Concert Band literature. This ensemble will build upon the Intermediate Concert Band experience. Please consult with your current teacher before requesting this course.

**Orchestra 1**

Course Code: HS6024

Duration: Year

Prerequisites: One year experience or permission of teacher required.

Orchestra 1 can be taken more than once.

Credits: 1.0

Orchestra 1 is open to experienced string players who wish to gain ensemble experience in different styles of music. Orchestra 1 generally comprises Grade 9 and 10 students.

**Orchestra 2**

Course Code: HS6025

Duration: Year

Prerequisites: Teacher placement. Orchestra 2 can be taken more than once.

Credits: 1.0

Orchestra 2 is the advanced String Orchestra of the school and entry is by audition open to all experienced violin, viola, cello, and double bass players. Specific instrumental techniques, ensemble skills, theoretical literacy, and historical awareness will be developed through the performance of a variety of orchestral literature from the Renaissance to the present. This ensemble will build on previous Orchestra I experience or demonstration of fifth position proficiency. Students should be able to demonstrate a variety of "off the string" bow strokes.

**Guitar 1**

Course Code: HS6026

Duration: Year

Prerequisites: None. Guitar 1 can be taken more than once.

Credits: 1.0

This is an introductory course dealing with the techniques and styles of guitar playing. Students will have hands-on experience with chords, plucking, and reading notes as well as tablature. Studies will be done through a variety of styles of music, from classical / flamenco to folk and rock and roll.

**Guitar 2**

Course Code: HS6027

Duration: Year

Prerequisites: Guitar 1 or prior private lessons required for this course. Guitar 2 can be taken more than once.

Credits: 1.0

This course builds on the techniques learned in the Guitar 1 class. Students will have hands-on experience with more advanced chord progressions, strumming patterns, and note/tablature reading. In addition, students will gain experience in a variety of finger picking styles and open tunings. Studies will be done through a variety of styles of music, from classical/flamenco to folk and rock and roll.

**IB Music SL/HL Y1-Y2**

Course Codes: HS6111 (SL Y1); HS6121 (SL Y2); HS6131 (HL Y1); HS6141 (HL Y2)

Duration: 2 years

Prerequisites: None

Credits: 1.0

Over the course of two years, IB Music participants develop a well-rounded base of musical knowledge for comparative analysis, performance, and composition. Students are expected to listen intelligently to a wide variety of musics from around the world and draw logical conclusions about the form, stylistic features, and structural elements. By gaining the technical vocabulary associated with Western Art Music theory, students will be able to analyze any work and make musical connections between different genres of music.

**Higher Level** coursework: HL students answer a further question on the listening paper and must create and present a solo performance.

## Combat Mask and Movement

Course Code: HS6061

Duration: Semester

Prerequisites: None

Credits: .5

This course is designed to help students of any level explore theatre through movement and body work. The primary focus will be on the use of mask, stage combat (unarmed and armed), as well as the use of gesture and movement for expression. Through this work students will learn to interpret, analyze, reflect, build communication skills, and perform. All students will have the opportunity to work with scripted and non-scripted theatre forms as they explore the dynamic world of physical theatre.

## Acting for the Stage and Beyond

Course Code: HS6062

Duration: Semester

Prerequisites: None

Credits: .5

Acting for the stage and beyond- This course is designed to give students the opportunity to explore some of the different methods used by actors to create believable roles. The primary focus will be on Stanislavski's Acting System, as well as other popular forms of acting. Students will have the opportunity to explore a variety of text as they work with scene partners to develop their acting skills in multiple formats. There will be one public performance as a final assessment of the course.

## Theatre Making and Directing

Course Code: HS6063

Duration: Year

Prerequisites: One previous theatre course

Credits: 1.0

- This is a more advanced course for students who are interested in continuing with their theatre education in high school and beyond. The primary focus on this course will be devising, directing plays and there will be considerable emphasis on ensemble work to build and maintain group dynamics. Students will have the opportunity to work with scripted and non-scripted materials to analyze, evaluate and create theatre using various theatrical styles and conventions. There will be a public showcase of student work at the end of the course.



## Stagecraft & Theatre Production

Course Codes: HS6032A (Semester 1); HS6032B (Semester 2)

Duration: Semester

Prerequisites: None

Credits: 0.5 credit each

The purpose of this course is to introduce the student to technical theatre, the behind-the-scenes work that goes into a theatrical production. As an art form, this course allows students opportunities to examine and participate in the art of creating an acting environment, an environment designed to transport the viewer from the here and now to the there and then. Students will create with shop tools, paint, lighting instruments, and sound equipment. This course may be repeated for credit.

## Audio Production

Course Codes: HS6034A (Semester 1); HS6034B (Semester 2)

Duration: Semester

Prerequisites: None

Credits: 0.5

This course will explore the multi-faceted world of the music industry by providing students the basic knowledge, training and technical skills necessary to operate the equipment required to produce a finished audio product in both studio situations and live performance. Through both theory and practice students will learn what it means to produce a variety of styles of music from recording, mastering to publishing and promotion. This course may be repeated for credit.

## IB Theatre SL/HL Y1-Y2

Course Codes: HS6112 (SL Y1); HS6122 (SL Y2); HS6132 (HL Y1); HS6142 (HL Y2)

Duration: Two years

Prerequisites: One year of drama or theatre is recommended.

Credits: 2.0

In the IB Theatre course students will explore theatre practices from Western and non-Western traditions and cultures. Students are encouraged to experience and participate in a wide and varied range of theatre activities, which include devising, performing, designing, directing, observing and reflecting on a range of different performance styles. Throughout the course students will develop academic skills appropriate for the study and understanding of theatre. They will also develop the confidence to explore and experiment – individually and collaboratively – on innovative projects that challenge established notions of theatre. Theatre is an ever-evolving art form, which reflects our ever-changing society. While year one of the course gives students a preparatory experience of the different assessment tasks, year two gives them the opportunity to choose more independently their focus for these tasks. By the completion of the course students will have created a collaborative theatre project, a director's notebook, and will have presented a solo performance informed by a theatre theorist.

**Higher Level Coursework:** The Higher Level Students engage in one extra unit, a research presentation based on a theatrical style of their own choosing.

**PHYSICAL/HEALTH EDUCATION COURSES**

**Physical And Health Education Department Flow Chart**

Grade 9 students will take:

**Physical & Health Education 1**

Grade 10 students will take:

**Physical & Health Education 2**

Grade 11 and 12 students may choose any of the courses below based on meeting prerequisites:

**PE 3:  
Sports League**  
(semester course)

**PE 3:  
Personal Fitness**  
(semester course)

**PE 3:  
Swimming & Water  
Safety Instructor**  
(semester course)

**PE 3:  
Lifeguarding**  
(semester course)

**Legend**  
 SAS course

## Physical & Health Education 1

Course Code: HS7000

Duration: Year

Prerequisites: None

Credits: 1.0

The PHE I course at Shanghai American School aims to foster a desire for lifelong fitness and health. This is done through a skills based program aimed at teaching students how to play a number of popular sports, alongside an introduction to health-related fitness. Within this, a strong emphasis is also placed on daily effort and participation.

Physical Education units include both team and individual activities including fitness, aquatics, basketball, badminton and soccer. Students are assessed against the SHAPE America standards, which SAS has adopted in an effort to provide the students with a guaranteed and viable curriculum designed around their health, well-being and longevity in physical activity.

The Health element of the course is designed to educate students in sexual health, self-esteem, values, decision-making skills, and advocacy. In accordance with their multiple intelligences, students are offered a variety of means by which to present their knowledge and understanding of course work.

## Physical & Health Education 2

Course Code: HS7001

Duration: Year

Prerequisites: Physical & Health Education 1

Credits: 1.0

The PHE II course at Shanghai American School continues to build upon previous learning and prepare students for life after PHE. The focus in Grade 10 is more on the theoretical side of both sport and fitness.

Students are encouraged to use advanced strategies and tactics in game based activities, and apply them both in open and closed tasks. In fitness they set personal goals aimed at improving and maintaining an aspect of their health in order to add context to their learning. They then design individualized programs using apps and websites, as they add meaning through real-life learning, and are assessed against the SHAPE America standards.

The Health element of the course builds upon what they learned in Grade 9 and once again adds context by narrowing its focus towards aspects of adolescence which the students feel are most important to them. Students are surveyed in order to find out what they feel affects them both inside and outside of school to facilitate this. Compulsory drug and alcohol education is then intertwined with their chosen topics, and the program is geared towards their needs to prepare them for Grades 11 & 12, and their college years.

## PE 3 – Personal Fitness

Course Code: HS7002

Duration: Semester

Prerequisites: Physical & Health Education 2 or equivalent

Credits: 0.5

This class is designed to help students achieve their goals in sport or advanced fitness. It is based on functional fitness tailored to the specific needs of each student. Training is progressive and includes core, functional, cardio, and sports-specific type training. The course begins with a fitness assessment unit where students will write personal goals for exercise and nutrition. Students will then keep journals as they design and implement their own personal fitness and nutrition plan based on their fitness test results.

Students will explore current topics in weight training and personal fitness and how to apply these to their own personal fitness programs and to the personal training of others. Students will be involved in learning elements of personal training and taking a leadership role with their fitness knowledge.

## PE 3 – Sports League

Course Code: HS7003

Duration: Semester

Prerequisites: Physical & Health Education 2 or equivalent

Credits: 0.5

In this class, opportunities are provided for students to experience sport as a player, coach, referee, and organizer. Students are introduced to concepts involved in sports management and tournament organization, while learning about the practical elements and fundamentals of each sport covered. Once the preparation has been done, students periodically organize and run intra-mural tournaments for the lower classmen. These experiences are written up and reflected upon before the group moves on to plan for the next set of intra-mural competitions.

This course is designed to develop not only knowledge and understanding of the intricacies of running sporting events, but also collaborative, organizational and leadership skills. Students are assessed against the SHAPE America standards, which SAS has adopted in an effort to provide the students with a guaranteed and viable curriculum designed around their health, well-being and longevity in physical activity.



### PE 3 – Swimming & Water Safety Instructor

Course Code: HS7006

Duration: Semester

Prerequisites: Physical & Health Education II or equivalent

The prerequisites for entry in the water safety instructor course are:

- Be at least 16 years of age by the last scheduled session of the instructor course;
- Demonstrate swimming skills consistent with ARC Learn to Swim Level 4, by swimming the following strokes with good form: front crawl, back crawl, breaststroke, elementary backstroke, sidestroke, butterfly, back float 1 minute and tread water for 1 minute. If you are a little weak in your stroke there is time to improve your skills and technique.

Credits: 0.5

This course is designed for students who have completed the PHE graduation requirement and would like to continue to develop their knowledge and skills in swimming and swim instruction. On completion, students will be swimming and water safety instructors. Certification is valid for 2 calendar years and renewable through instructing at least one course per authorized period. To successfully complete the instructor course:

- Successfully complete all practice-teaching assignments.
- Pass 3 preparatory quizzes and the final written exam with a minimum grade of 80 percent.

Students must demonstrate that they are mature and responsible in and around the aquatic environment.

Course Texts: ARC: Water Safety Instructor's Manual and Swimming and Water Safety Book and on-line video material.

### PE 3 – Lifeguarding

Course Code: HS7007

Duration: Semester

Prerequisites: Physical & Health Education II or equivalent

Physical & Health Education I & II or equivalent; be at least 15 years of age by the last scheduled session of the course; swim 500 yards continuously as follows: 200 yards front crawl using rhythmic breathing, 100 yards breaststroke and 200 yards of front crawl and/or breaststroke. Swim 20 yards using front crawl or breaststroke, surface dive to a depth of 7-10 feet, retrieve a 10 pounds/4.5 kg object, return to the surface and swim 20 yards back to the starting point with the object within a time of 1:40.00. If you are not swim fit at the start of the course you will have 3 weeks to complete the swimming prerequisite.

Credits: 0.5

The course teaches candidates the skills and knowledge needed to prevent and respond to aquatic emergencies. It will prepare students to recognize and respond quickly and effectively to emergencies, prevent drowning and injuries, and administer first aid, CPR/AED. The course requires a reasonably strong swimming ability equivalent to our middle or upper group levels in swimming in PE.

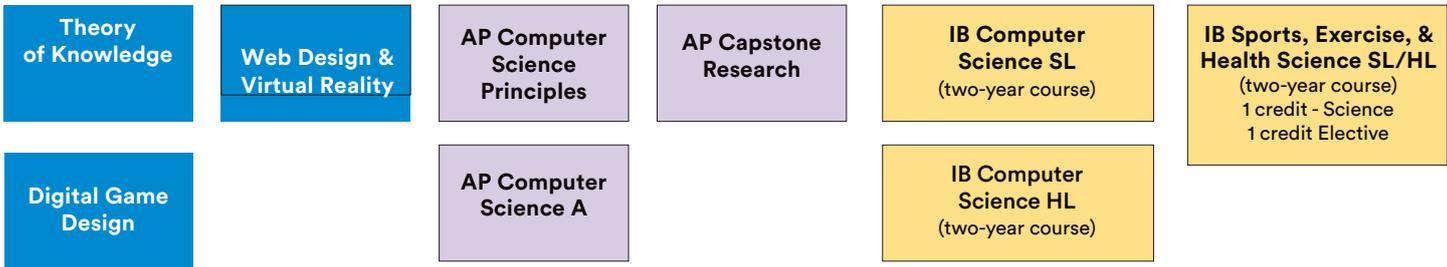
Students must demonstrate that they are mature and responsible. This course leads to certification for Life-guarding, First Aid and CPR/AED, which is valid for 2 calendar years from the date of course completion.

To successfully complete the lifeguard course the student must: participate in all activities, successfully perform the required skills, complete 6 skill scenarios, pass 3 quizzes and pass the two ARC written exams with a minimum grade of 80 percent or better. Students must also demonstrate that they are mature and responsible in and around the aquatic environment. Course Texts: ARC: Lifeguard Participants Manual.



**ELECTIVE COURSES**

Students may choose any of the courses below based on meeting prerequisites:



**Legend**

- AP course
- IB course
- SAS course

## Theory of Knowledge

Course Codes: HS8101 (Y1 – grade 11 students only),  
HS8102 (Y2 – grade 12 students only)

Duration: Year

Credits: 1.0

Theory of Knowledge (TOK) is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge. It is a required core course for the IB diploma and is also available for non-diploma students. The TOK course examines how we know what we claim to know. It does this by encouraging students to analyze knowledge claims and explore knowledge questions. The most central of these is “How do we know?”, while other questions include: What counts as evidence for X?; How do we judge which is the best model of Y? and What does theory Z mean in the real world? Through discussions of these and other questions, students gain greater awareness of their personal and ideological assumptions, they develop an appreciation of the diversity and richness of cultural perspectives, and they reflect critically on diverse Ways of Knowing and on Areas of Knowledge.

Note that this course runs during the second semester of grade 11 and the first semester of grade 12. It is expected that students will take both semesters. The external IB assessments consist of 1600-word essay & one oral presentation, and take place during the grade 12 semester.

## AP Capstone Research

Course Code: HS8400

Duration: Year

Prerequisites: AP Capstone Seminar

Credits: 1.0

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year long mentored, research-based investigation to address a specific question. In this course, students further develop the skills acquired in the AP Seminar course by learning about and understanding research methods; employing ethical research practices, and accessing, analyzing, and synthesizing information as they address a research question. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## Intro to Robotics and Game Development

Course Code: HS8011

Duration: Semester

Credits: 1.0

Robotics & Game Development will be taught over a year long course and is designed for complete beginners with no previous background in computer science or robotics, and enables students to advance their progress in these areas and learn advanced topics. The Game Development course is highly visual, dynamic, and interactive, making it engaging for new coders. The course is project based where students will design and build several games over the duration of the course. Once the course is completed, students will be well skilled in interactive game design in Javascript. In the second semester your education in programming using an Arduino microcontroller will begin. Throughout the semester you will learn to control many external, physical devices: LEDs, light strips, servos, and different types of motors. Many different digital and analog sensors will be used to create devices that interact with the user and the environment. Once this section of the course is complete, students will be skilled in the basics of Robotics and the various disciplines attached to it

## Web Design and Virtual Reality

Course Code: HS8009

Duration: Year

Credits: 1.0

The Web Design course is designed for complete beginners with no previous background in computer science. The course is highly visual, dynamic, and interactive, making it engaging for new students. In today's world, web pages are the most common medium for sharing ideas and information. Learning to design websites is an incredibly useful skill for any career path. The Web Design course is a project-based course that teaches students how to build their own web pages. Students will learn the languages HTML, CSS & Bootstrap, and will create their own live homepages to serve as portfolios of their creations. By the end of this course, students will be able to explain how web pages are developed and viewed on the Internet, analyze and fix errors in existing websites, and create their very own multi page websites. Students will learn the foundations of user interface design, rapid prototyping and user testing, and will work together to create professional, mobile responsive websites.

Virtual Reality is added onto existing HTML skills to introduce students to the basics of building virtual reality worlds using HTML and the A-Frame JavaScript library. In this course, students will learn how to make virtual reality worlds with shapes, animation, and interactions in A-Frame. Students will be able to view and share their creations in a VR device.

## AP Computer Science Principles

Course Code: HS8204

Duration: Year

Credits: 1.0

AP Computer Science Principles introduces students to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing changes the world. This rigorous course promotes deep learning of computational content, develops computational thinking skills, and engages students in the creative aspects of the field. The course teaches the concepts and computational thinking practices central to the discipline of computer science — and is organized around the investigation of seven topics, all of which are fundamental principles of computing and STEM (science, technology, engineering, mathematics) careers.

Students who take the AP Computer Science Principles course will develop a range of skills vital to success in subsequent college courses, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world.

## AP Computer Science A

Course Code: HS8201

Duration: Year

Prerequisites: Algebra II/Trigonometry

Credits: 1.0

The goals of an AP course in computer science are comparable to those in the introductory sequence of courses for computer science majors offered in college and university computer science departments.

It is not expected, however, that all students in an AP Computer Science course will major in computer science at the university level. An AP Computer Science course is intended to serve both as introductory course for computer science majors and as a course for people who will major in other disciplines that require significant involvement with technology. All students enrolled in an AP subject must sit the external exam at the end of the school year.

**IB Computer Science SL/HL Y1-Y2**

Course Codes: HS8115 (SL Y1); HS8125 (SI Y2); HS8135 (HL Y1), HS8145 (HL Y2)

Duration: Two years

Credits: 2.0

The IB computer science course helps students become aware of how computer scientists work and communicate with each other and with other stakeholders in the successful development and implementation of IT solutions. While the methodology used to solve problems in computer science may take a wide variety of forms, the group 4 computer science course emphasizes the need for both a theoretical and practical approach. Students acquire an understanding of the fundamental concepts of computational thinking and of how computers and other digital devices operate, and learn the skills necessary to create computer programs using the Java programming language. During the course students will develop computational solutions. This will involve the ability to: identify a problem or unanswered question; design, prototype, and test a proposed solution liaise with clients to evaluate the success of the proposed solution; and make recommendations for future developments. Students are assessed internally through a software design and creation project and externally through a written exam.

**Higher Level Coursework:** Students taking IB Computer Science at the HL level will explore a number of higher level programming concepts and skills including recursive algorithms, the creation and use of abstract data structures, systems resource management, and control systems.

**IB Sports, Exercise, & Health Science SL Y1-Y2**

Course Codes: 7030 (Y1), 7031 (Y2)

Prerequisites: Physical & Health Education II

Duration: Two years

Credits: 1.0 Science (Y1), 1.0 Elective (Y2)

This two-year course aims to introduce students to some of the scientific components that make up the study of sport, exercise, and health. The diploma program course in Sports, Exercise, and Health Science involves the study of the science that underpins physical performance and provides the opportunity to apply these principles.

As stated in the IB guide, this course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology, and nutrition, which are studied in the context of sport, exercise, and health. Students will cover both core and option topics and carry out practical (experimental) investigations in both laboratory and field settings. This will provide an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyze human performance. Where relevant, the course will address issues of internationalism and ethics by considering sport, exercise, and health relative to the individual and in a global context.

**Higher Level Coursework:** Students at HL are required to study additional higher level (AHL) material, conduct extra hours in the lab, and cover further HL topics within the options. The distinction between SL and HL is one of breadth and depth. Additional units include further anatomy; the endocrine system; fatigue; friction and drag; skill acquisition and analysis; genetics and athletic performance, and exercise and immunity.



## LEARNING SUPPORT

Student may be placed into the following class:

Learning Support

### Learning Support

Course Code: HS8901

Prerequisites: Grade 9, 10, 11, & 12 students by placement

Credits: 0

The Learning Support (LS) program provides opportunities for students with learning differences to experience academic success. Through a combination of skills-based and course-specific support, the program contributes to each student's academic and personal growth. Students in the LS program may receive push-in and/or pull-out learning support as well as accommodations for learning and assessment. The program focuses on learning strategies that will contribute to each student's academic and personal growth.

## ENGLISH AS AN ADDITIONAL LANGUAGE (EAL)

Grade 9 Student may be placed into the following class:

English 9: Sheltered  
Immersion EAL Course

### English as an Additional Language (EAL) at Shanghai American School

Our students come from a variety of language backgrounds. Some may need support in building academic English proficiency which will be determined through language proficiency testing and a review of previous school records. All students, however, are immersed in a rigorous college-preparatory academic curriculum.

SAS is committed to additive bilingualism (maintaining home languages while developing English language proficiency). It is our expectation that our EAL students will successfully participate in the SAS learning community, have complete access to our entire curriculum, experience fully the social benefits of being with their peers, and also receive support specific to their language acquisition needs.

### EAL Support

Students will have a certified EAL teacher available to support them during general supervised study hall. Ninth grade students who are identified as needing more support will receive EAL support during their English 9 and Asian History courses. English 9 is taught in a sheltered immersion model. A certified EAL teacher will work with the subject teachers in Asian history. Students will also have a certified EAL teacher available to them during general supervised study hall.

**English 9: Sheltered Immersion EAL Course**

Course Code: HS1000B

Duration: Year

Prerequisites: EAL+ Placement

Credits: 1.0

Grade 9 EAL+ students will have a sheltered immersion English course that is co-taught by both an English teacher and an EAL instructor in order to provide direct English language support in a small group setting. In this course, students analyze a wide range of literature that is connected to a variety of different cultures. Students study at least four of the following genres: novel, short story, poetry, drama, and nonfiction. The literature serves not only as a vehicle for understanding human experience more richly but also as a means for developing critical thinking, language, and communication skills. Students learn the tools of literary analysis and explore a variety of writing styles and forms. Oral communication skills are developed through participation in seminars, discussions, and oral/dramatic presentations.



**ONLINE LEARNING**

Grade 11/12 may enroll in the following online learning options:

**Pamoja Education**

**Virtual High School**

**Legend**

- Pamoja IB online courses
- VHS online courses



pamoja education  
Teaching the IB online



SAS is proud to offer even broader curriculum opportunities to our students.

Where a clear need exists we may be able to provide IB online courses. These online courses will be available in the first instance to IB Diploma students. While studying online is an academically respected option, it may not suit all students. Course tuition fees will be paid by SAS.

The online IB courses will be offered through Pamoja, an approved provider of IB courses online. You can find out more about Pamoja on their website: <http://www.pamojaeducation.com>

Why would an IB student take a course online?

- The student's subject choices do not quite match the master schedule. Occasionally there are scheduling conflicts, and rather than constraining a student to make a second choice, online could be an option.
- If there were only a small amount of students wanting to do a course, and it was not offered at SAS.
- Other extenuating circumstances, including students transferring part way through the diploma.

#### Courses offered by Pamoja:

IB Mandarin ab initio  
IB French ab initio  
IB Business & Management HL  
IB Business & Management SL  
IB Information Technology in a Global Society HL  
IB Information Technology in a Global Society SL  
IB Philosophy SL



#### VIRTUAL HIGH SCHOOL

Welcome to Virtual High School  
Global Consortium

SAS students in grades 11 and 12 may request to take an online course from the Virtual High School (VHS) for SAS credit. These courses will be taken entirely online from a non-SAS teacher. Courses offered by VHS include AP and regular courses. Many VHS courses are offered for one semester while AP classes are offered for a full year. You can peruse the courses available in the VHS Course Catalog at <http://www.govhs.org/Pages/Academics-Catalog>.

SAS students may take a maximum of seven courses in any semester, which can include one VHS course per semester. The grade for the VHS course will appear on the student's SAS report card and transcript and will be calculated as part of their grade point average. There is no additional cost for an approved SAS student to take a VHS course.

Students who are interested in taking a VHS course should review all the relevant information on the Virtual High School site and complete the VHS Pre-Student Survey (<http://www.govhs.org/Content/InfoFor-StudentSurvey>) to decide if an online course is right

for them. Students should then meet with their guidance counselor to discuss the implications of taking a VHS course.

Students who, after meeting with their counselor, would like to request to take an online VHS course should complete the VHS application form (available in the Counseling Office) and attach a copy of the VHS Pre-Student Survey with their answers. The completed application should be submitted to the student's counselor with their course selection form at the regular due date for course selections.

Seats for VHS courses are limited. Mr. Tracie Dotson, Puxi HS VHS site coordinator, will make the final approval for all VHS course requests. Priority for VHS courses will be given to students with schedule conflicts.

If you are interested in taking an online course, please review the VHS Course Catalog (<http://www.govhs.org/Pages/Academics-Catalog>) and carefully decide which courses you might like to take. If you have any questions about the VHS program at SAS, please contact your counselor.

# Example of Virtual High School Course Offerings



## Shanghai American School - Virtual High School Partnership

Students in grades 11 and 12 may request to take an online course from the Virtual High School (VHS) ([www.goVHS.org](http://www.goVHS.org)) for SAS credit. These courses will be taken entirely online from a non-SAS teacher. The grade for the VHS course will appear on the students SAS transcript and will be calculated as part of their grade point average. Interested students must apply and receive administrative approval. There is no cost for an approved SAS student to take a VHS course. However, spaces are limited. For more information see Mr. Moody ([mark.moody@saschina.org](mailto:mark.moody@saschina.org)).

Virtual High School offers a catalog of full semester courses in the Arts, Foreign Language, Language Arts, Life Skills, Math, Science, Social Studies, Technology, and AP1 Study to students in VHS member schools. The courses listed are current at the time of publication. Visit our website at [www.goVHS.org](http://www.goVHS.org) for the most current offerings.

AP® Courses	Language Arts	Mathematics con'd	Social Studies con'd
AP® Environmental Science	Around the World in 80 Days*	Number Theory	Philosophy I
AP® French Language and Culture	Creative Writing	Pre-Calculus: Advanced Trigonometry	Practical Law
AP® Human Geography	English 10	Pre-Calculus: Functions	Psychology Honors
AP® Music Theory	English 11	Statistics Honors	Psychology of Crime
AP® Spanish Language and Culture	English 12		Sociology*
AP® World History	Essay Writing		Sports and American Society
	Fantasy and Science Fiction Short Stories		The Glory of Ancient Rome
<b>Arts</b>	Film and Literature	<b>Science</b>	The Golden Age of Classical Greece
Art History	Folklore and Literature of Myth, Magic, and Ritual	Advanced Topics in Chemistry	The Holocaust
Art History: Art of the Caribbean Islands	Ghoulies, Ghosties, and Long-Legged Beasties*	Anatomy & Physiology	U.S. Government
Creating Art History*	Horror Writers	Animal Behavior and Zoology	U.S. History: 1745 - 1877
History and American Pop Music*	Journalism in the Digital Age	Astronomy Principles	U.S. History: 1877 - Present
History of Photography	Literature of the World	Biochemistry	World Conflict, a United Nations Introduction
Music Listening and Critique*	Mythology	Bioethics	World History: 1450 - Present
Music: Fundamentals of Composition*	Poetry Writing	Biotechnology	World History: Pre-History to 1500
	Screenwriting Fundamentals*	Chemistry Honors	
<b>Business</b>	Shakespeare in Films	Climate Change	
Business Math	To Kill a Mockingbird*	DNA Technology	
Entrepreneurship: Starting Your Own Business	Twentieth Century Women Authors	Earth and Space Systems Science	
International Business	Young Adult Literature*	Environmental Science	
Investing in the Stock Market		Epidemics	
Marketing and the Internet	<b>Life Skills/Health</b>	Evolution and the Nature of Science	
Personal Finance	Kindergarten Apprentice Teacher	Forensic Science	
	Now What Will You Do?	Genes and Disease	
<b>World Language</b>	Parenting in the Twenty-First Century*	Meteorology	<b>Computer Science and Technology</b>
Chinese Language and Culture	Perspectives in Health	Nuclear Physics	CAD*
German language and Culture	Physical Education: Personal Fitness	Oceanography	Computational Science and Engineering Using Java
Italian Language and Culture	Preparing for College	Physics	Computer Science Honors
Latin 1		Prevetinary Medicine	Creative Programming from Scratch
Latin 2		The Human Body	Programming in Visual Basic*
Portuguese 1	<b>Mathematics</b>		Sustainable Energy Engineering
Russian Language and Culture	Algebra 1*	<b>Social Studies</b>	Technology and Multimedia*
Spanish 1	Algebra 2*	Constitutional Law	Video Game Design Using GameMaker
Spanish 2	Calculus Honors	Criminology	Web Design: Advanced
	Geometry	Current Issues in American Law and Justice	Web Design Basics
	Math You Can Use In College	Eastern and Western Thought	
	Mathematical Reasoning and Logic	Economics Honors	
	Mathematics of Electricity*	Peacemaking	
			<b>Engineering</b>
			Engineering for Sustainable Energy
			Engineering Principles
			1 VHS is qualified through the AP Course Audit to label its courses "AP"



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Shanghai American School inspires in all students:

上海美国学校激励并培养所有的学生:

A lifelong passion for learning

终身学习的热情

A commitment to act with integrity and compassion

诚信与仁爱的信念

The courage to live their dreams.

追求梦想的勇气。



### **Puxi Campus**

258 Jinfeng Road, Huacao Town, Minhang District,  
Shanghai, China 201107 Tel: 6221-1445

[www.saschina.org](http://www.saschina.org)

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