# HIGH SCHOOL COURSE CATALOG 

## SHANGHAI AMERICAN SCHOOL

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[^0]SAS is fully accredited by the Western Association of Schools and Colleges (WASC) and is an IB World School. SAS is also a member of CIS, EARCOS and NACAC.

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[^1]A Shanghai American School education equips students to transfer their knowledge and skills beyond the classroom, in authentic settings, over a lifetime.

CRITICAL THINKERS - SAS students are critical thinkers who develop ideas and construct arguments by questioning, evaluating, synthesizing, and considering perspective. SAS students . . .

- Consider multiple approaches and perspectives to evaluate decisions
- Ask relevant, discerning questions to stimulate reflection
- Evaluate evidence and sources to support arguments and conclusions
- Synthesize and apply new understanding to a variety of contexts

SKILLFUL COMMUNICATORS - SAS students are skillful communicators who advocate for self, others, and ideas in more than one language by listening, responding, and articulating through multiple media. SAS students . . .

- Use appropriate listening skills to integrate information across contexts
- Respond to emotions in self and in others
- Articulate ideas with exceptional clarity
- Select an appropriate medium/a to communicate with an audience

EFFECTIVE COLLABORATORS - SAS students are effective collaborators who help teams innovate outcomes to achieve a goal by holding themselves and others accountable, contributing in productive ways, and sustaining respectful interactions. SAS students . . .

- Hold themselves and others accountable for team agreements
- Build on the perspectives and contributions of others
- Develop and implement appropriate strategies to manage interactions

CREATIVELEARNERS - SAS students are creative learners who engage their imaginations to generate novel ideas, demonstrate flexible thinking, evaluate approaches, and take action. SAS students . . .

- Use their imagination to generate novel ideas
- Demonstrate flexible thinking
- Use strategies to evaluate the creative process
- Execute ideas with exceptional clarity and effectiveness


## "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 OFFERINGS

This catalogue represents courses that may be offered in the coming school year. It is based on the number of student requests as to whether a couse will run.

## 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 <br> 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



## MASTER COURSE LIST

| E N G L I S H |  |  |  |
| :--- | :--- | :---: | :---: |
| Course | Course <br> Codes | Credits | Grades |
| English 9 | HS1000 | 1 | 9 |
| English 10 | HS1001 | 1 | 10 |
| English 11 | HS1002 | 1 | 11 |
| English 12 | HS1003 | 1 | 12 |
|  <br> Composition | HS1200 | 1 | 11,12 |
|  <br> Composition | HS1201 | 1 | 12 |
| IB English A: Literature SL Y1-Y2 | HS1110 <br> HS1120 | 2 | 11 <br> 12 |
| IB English A: Literature HL Y1-Y2 | HS1130 <br> HS1140 | 2 | 11 <br> 12 |
|  <br> Literature SL Y1-Y2 | HS1111 <br> HS1121 | 2 | 11 <br> 12 |
|  <br> Literature HL Y1-Y2 | HS1131 <br> HS1141 | 2 | 11 <br> 12 |


| S O C I A L S T U D I E S | page 15 |  |  |
| :--- | :--- | :---: | :---: |
| Course | Course <br> Codes | Credits | Grades |
| Asian History | HS2000 | 1 | 9 |
| Modern World History | HS2001 | 1 | $10,11,12$ |
| US History | HS2002 | 1 | $10,11,12$ |
| Sociology | HS2009 | 1 | 11,12 |
| AP US History | HS2202 | 1 | $10,11,12$ |
| AP Psychology | HS2203 | 1 | 11,12 |
| AP Economics | HS2204 | 1 | 11,12 |
| AP World History | HS2206 | 1 | $10,11,12$ |
| AP Human Geography | HS2207 | 1 | $10,11,12$ |
| IB Economics SL Y1-Y2 | HS2114 <br> HS2124 | 2 | 11 <br> 12 |
| IB Economics HL Y1-Y2 | HS2134 <br> HS2144 | 2 | 11 <br> 12 |
| IB Business Management SL Y1-Y2 | HS2117 <br> HS2127 | 2 | 11,12 |
| IB Business Management HL Y1-Y2 | HS2137 <br> HS2147 | 2 | 11,12 |
| IB Psychology SL Y1-Y2 | HS2113 <br> HS2123 | 2 | 11 <br> 12 |
| IB Psychology HL Y1-Y2 | HS2133 <br> HS2143 | 2 | 11 <br> 12 |
| IB Environmental Systems \& | HS4115 <br> HS4125 | 2 | 11 <br> 12 |
| Societies SL Y1-Y2 | HS2153 <br> HS2154 | 2 | 11 <br> 12 |
| IB Global Politics SL Y1-Y2 | HS2163 <br> HS2164 | 2 | 11 <br> 12 |


| M A T H E M A T I C S |  |  |  |
| :--- | :--- | :---: | :---: |
| Course | Course <br> Codes | Credits | Grades |
| Integrated Math 1 (IM1) | HS3203 | 1 | 9,10 |
| Integrated Math 2 (IM2) | HS3205 | 1 | 9,10 |
| Integrated Math 2+ (IM2+) | HS3205A | 1 | 9,10 |
| Integrated Math 3 (IM3) | HS3207 | 1 | 10,11 |
| Integrated Math 3+ (IM3+) | HS3208 | 1 | 10,11 |
| Statistical Math | HS3007 | 1 | 11,12 |
| Pre-Calculus | HS3011 | 1 | 11,12 |
| AP Pre-Calculus | HS3012 | 1 | 11,12 |
| AP Calculus AB | HS3200 | 1 | 11,12 |
| AP Calculus BC | HS3201 | 1 | 11,12 |
| AP Statistics | HS3202 | 1 | 11,12 |
| Multivariable Calculus | HS3204 | 1 | 12 |
| IB Math: App + Interpretation <br> SL Y1-Y2 | HS3113 <br> HS3123 | 2 | 11 <br> IB Math: App + Interpretation <br> HL Y1-Y2 <br> IB Math: Analysis + Approaches <br> SL Y1-Y2 <br> IB Math: Analysis + Approaches <br> HL Y1-Y2 <br> HS3114 <br> HS3124 |
| HS3134 | 2 | 2 | 11 |
| HS3144 | 2 | 12 |  |
| 12 |  |  |  |


| SCIENCE |  |  | page 24 |
| :---: | :---: | :---: | :---: |
| Course | Course Codes | Credits | Grades |
| Physics/Chemistry Lab Science | HS4007 | 1 | 9 |
| Biology Lab Science | HS4008 | 1 | 10 |
| Chemistry | HS4004 | 1 | 11,12 |
| Earth \& Space Science | HS4029 | 1 | 11,12 |
| AP Biology | HS4200 | 1 | 11,12 |
| AP Chemistry | HS4201 | 1 | 12 |
| AP Physics 1 | HS4210 | 1 | 11,12 |
| AP Environmental Science | HS4203 | 1 | 11,12 |
| AP Physics C | HS4206 | 1 | 12 |
| IB Biology SL Y1-Y2 | $\begin{aligned} & \text { HS4110 } \\ & \text { HS4120 } \\ & \hline \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| IB Biology HL Y1-Y2 | $\begin{aligned} & \text { HS4130 } \\ & \text { HS4140 } \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| IB Chemistry SL Y1-Y2 | $\begin{aligned} & \text { HS4111 } \\ & \text { HS4121 } \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| IB Chemistry HL Y1-Y2 | $\begin{aligned} & \text { HS4131 } \\ & \text { HS4141 } \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| $\begin{array}{lll} & & \text { Y1 } \\ \text { S1 } \\ \text { IB Computer Science } & & \text { S2 } \\ & \text { Y2 } & \text { S1 } \\ & & \text { S2 }\end{array}$ | HS8115 <br> HS8125 <br> HS8135 <br> HS8145 | 2 | 11,12 |
| IB Environmental Systems \& Societies SL Y1-Y2 | $\begin{aligned} & \text { HS4115 } \\ & \text { HS4125 } \\ & \hline \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| IB Physics SL Y1-Y2 | $\begin{aligned} & \text { HS4112 } \\ & \text { HS4122 } \\ & \hline \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| IB Physics HL Y1-Y2 | $\begin{aligned} & \text { HS4132 } \\ & \text { HS4142 } \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |


| C H I N E S E L A N G U A G E |  |  |  |
| :--- | :--- | :---: | :---: |
| Course | Course <br> Codes | Credits | Grades |
| Novice Chinese | HS5024A | 1 | $9,10,11,12$ |
| Intermediate Low Chinese | HS5025A | 1 | $9,10,11,12$ |
| Intermediate Mid Chinese | HS5026 | 1 | $9,10,11,12$ |
| Intermediate High Chinese | HS3033 | 1 | $9,10,11,12$ |
| Advanced Low Chinese | HS5031 | 1 | $9,10,11,12$ |
| Advanced Mid Chinese | HS5032 | 1 | $9,10,11,12$ |
| Advanced High Chinese | HS3034 | 1 | $9,10,11,12$ |
| Superior Chinese | HS5147 | 1 | 11,12 |
| IB Mandarin Ab Initio SL Y1-Y2 | HS5159 <br> HS5150 | 2 | 11 <br> 12 |
| IB Mandarin B SL Y1-Y2 | HS5113 <br> HS5123 | 2 | 11 <br> 12 |
| IB Mandarin B HL Y1-Y2 | HS5133 <br> HS5143 | 2 | 11 <br> 12 |
| IB Chinese A: Lang. \& Lit. SL <br> Y1-Y2 | HS5114 <br> HS5124 | 2 | 11 <br> 12 |
| IB Chinese A: Lang. \& Lit. HL <br> Y1-Y2 | HS5134 <br> HS5144 | 2 | 11 <br> 12 |


| G L O B A L L A N G U A G $\mathbf{l}$ |  |  |  |
| :--- | :--- | :---: | :---: |
| Course | Course <br> Codes | Credits | Grades |
| French Novice | HS2001 | 1 | $9,10,11,12$ |
| French Intermediate Mid | HS5002 | 1 | $9,10,11,12$ |
| French Intermediate High | HS5003 | 1 | $9,10,11,12$ |
| French Advanced Low | HS5004 | 1 | $9,10,11,12$ |
| French Advanced Mid | HS5022 | 1 | $9,10,11,12$ |
| IB French Ab Initio Y1-Y2 | HS5151 <br> HS5152 | 2 | 11 <br> 12 |
| IB French B SL Y1-Y2 | HS5110 <br> HS5120 | 2 | 11 |
| IB French B HL Y1-Y2 | HS5130 <br> HS5140 | 2 | 11 <br> 12 |
| Spanish Novice | HS5005 | 1 | $9,10,11,12$ |
| Spanish Intermediate Mid | HS5006 | 1 | $9,10,11,12$ |
| Spanish Intermediate High | HS5007 | 1 | $9,10,11,12$ |
| Spanish Advanced Low | HS5008 | 1 | $9,10,11,12$ |
| Spanish Advanced Mid | HS5021 | 1 | $9,10,11,12$ |
| IB Spanish Ab Initio Y1-Y2 | HS5155 <br> HS5156 | 2 | 11 <br> 12 |
| IB Spanish B SL Y1-Y2 | HS5111 <br> HS5121 | 2 | 11 <br> 12 |
| IB Spanish B HL Y1-Y2 | HS5131 <br> HS5141 | 2 | 11 <br> 12 |
| IB Self Taught Language A1 SL | HS5102 <br> HS5103 | 2 | 11 <br> 12 |


| VISUAL ARTS |  |  | page 38 |
| :---: | :---: | :---: | :---: |
| Course | Course <br> Codes | Credits | Grades |
| Art Foundations | HS6001 | 1 | 9,10,11,12 |
| Studio Art | HS6014 | 1 | 10,11,12 |
| Advanced Studio Art 1 | HS6007 | 1 | 11,12 |
| Advanced Studio Art 2 | HS6008 | 1 | 12 |
| Photography 1 | HS6035 | 1 | 10,11,12 |
| Advanced Photography | HS6012 | 1 | 11,12 |
| Creativity and Design (Inno G9) | HS6050 | 1 | 9 |
| Innovation \& Design (Inno G10) | HS6051 | 1 | 10 |
| AP 2D Design | HS6202 | 1 | 11, 12 |
| IB Visual Arts SL Y1-Y2 | $\begin{array}{\|l} \hline \text { HS6110 } \\ \text { HS6120 } \\ \hline \end{array}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| IB Visual Arts HL Y1-Y2 | $\begin{aligned} & \text { HS6130 } \\ & \text { HS6140 } \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| Digital Film Making | HS8001 | 1 | 9,10,11,12 |
| Advanced Digital Film Making 1,2,3 | $\begin{array}{\|c\|} \hline \text { HS8005 } \\ \text { HS8005B } \\ \text { HS8005C } \\ \hline \end{array}$ | 1 | $\begin{gathered} 10,11,12 \\ 11,12 \\ 12 \\ \hline \end{gathered}$ |
| IB Film SL Y1-Y2 | $\begin{aligned} & \text { HS8165 } \\ & \text { HS8175 } \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \\ & \hline \end{aligned}$ |
| IB Film HL Y1-Y2 | $\begin{aligned} & \text { HS8185 } \\ & \text { HS8195 } \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \\ & \hline \end{aligned}$ |
| Graphic Design | HS8010 | 1 | 9,10,11,12 |
| Advanced Graphic Design 1, 2, 3 | $\begin{array}{\|l\|} \hline \text { HS8010A } \\ \text { HS8010B } \\ \text { HS8010C } \\ \hline \end{array}$ | 1 | $\begin{gathered} 10,11,12 \\ 11,12 \\ 12 \\ \hline \end{gathered}$ |



| PERFORMING ARTS |  |  | page 42 |
| :---: | :---: | :---: | :---: |
| Course | Course Codes | Credits | Grades |
| Contemporary Music | HS1404 | 1 | 9,10,11,12 |
| Advanced Choir | HS6041 | 1 | 9,10,11,12 |
| Concert Band: Beginning | HS6039 | 1 | 9 |
| Concert Band: Intermediate | HS6042 | 1 | 9,10,11,12 |
| Concert Band: Advanced | HS6043 | 1 | 9,10,11,12 |
| Orchestra: Prelude | HS6054 | 1 | 9,10 |
| Orchestra: Intermezzo | HS6056 | 1 | 9,10 |
| Orchestra: Finale | HS6055 | 1 | 9,10,11,12 |
| Orchestra: Advanced | HS6045 | 1 | 9,10,11,12 |
| Theatre Design | HS6059 | 1 | 9,10,11,12 |
| Advance Theatre Design | HS6060 | 1 | 10,11,12 |
| Theatre 1 | HS6057 | 1 | 9,10,11,12 |
| Theatre 2 | HS6058 | 1 | 10,11,12 |
| Dance 1 | HS7010 | 1 | 9,10,11,12 |
| Dance 2 | HS7011 | 1 | 9,10,11,12 |
| IB Dance SL Y1-Y2 | $\begin{aligned} & \text { HS7013 } \\ & \text { HS7033 } \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| IB Dance HL Y1-Y2 | $\begin{array}{\|l\|} \hline \text { HS7023 } \\ \text { HS7043 } \end{array}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| IB Music SL Y1-Y2 | $\begin{aligned} & \text { HS6111 } \\ & \text { HS6121 } \end{aligned}$ | 2 | 11 |
| IB Music HL Y1-Y2 | $\begin{aligned} & \text { HS6131 } \\ & \text { HS6141 } \end{aligned}$ | 2 | 11 |
| IB Theatre SL Y1-Y2 | $\begin{aligned} & \text { HS6112 } \\ & \text { HS6122 } \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |
| IB Theatre HL Y1-Y2 | $\begin{aligned} & \text { HS6132 } \\ & \text { HS6142 } \end{aligned}$ | 2 | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |


| PHYSICAL AND HEALTH EDUCATION |  |  | page 47 |
| :--- | :--- | :---: | :---: |
| Course | Course <br> Codes | Credits | Grades |
| Physical \& Health Education 1 | HS7000 | 1 | 9 |
| Physical \& Health Education 2 | HS7001 | 1 | 10 |
| Physical \& Health Education 3 - <br> Personal Fitness | HS7004 | 1 | 11,12 |
| PE 3 - Water Safety Instructor | HS7006 | 0.5 | 11,12 |
| PE 3 - Lifeguarding | HS7007 | 0.5 | 11,12 |


| E L E C T I V E S |  |  |  |
| :--- | :--- | :---: | :---: |
| Course | Course <br> Codes | Credits | Grades |
| IB Theory of Knowledge Y1-Y2 | HS8101 <br> HS8102 | 1 | 11 <br> 12 |
| AP Computer Science A | HS8201 | 1 | 11,12 |
| AP Computer Science Principles | HS8204 | 1 | 11,12 |
| AP Capstone Seminar (Y1 of <br> Capstone Diploma or Certificate) | HS8202 | 1 | 10 (Inno), 11 |
| AP Capstone Research (Y2 of <br> Capstone Diploma or Certificate) | HS8203 | 1 | 11 (Inno. <br> Inst. <br> only),12 |
| IB Computer Science SL Y1-Y2 | HS8115 | 1 | 11,12 |
| IB Computer Science HL Y1-Y2 | HS8135 | 1 | 11,12 |
| Electrical and Mechanical Design | HS6066 | 1 | $9,10,11,12$ |
| Engineering and Robotics | HS6067 | 1 | $9,10,11,12$ |
| Y1 S1 | HS8030 <br> S2 <br> SS | HS8031 <br> HS8032 | 0.5 |
| H2 | 11,12 |  |  |
| Internship Y2 |  |  |  |



CollegeBoard AP

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## Special Programs @ SAS

Shanghai American School, in addition to offering a wide variety of courses in Core Academic areas, has a number of Special Programs available to our high school students in their pursuit of learning. These Special Programs include:

- Advanced Placement Capstone Program and Diploma
- Innovaton Institute
- Internship Program
- Online Classes@SAS
- Virtual High School
- IB Diploma


## Advanced Placement Capstone Program and Diploma

## 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 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

APCapstone
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 ${ }^{\text {TM }}$.

## APCapstone <br> Certificate"

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 ${ }^{\text {Tw }}$, signifying successful performance in those courses.

The AP Capstone program begins with the AP seminar course which all Innovation Institute 10th graders take and which, otherwise, is available in grade 11.


## The International Baccalaureate (IB) Diploma Program

The International Baccalaureate Diploma Program is a rigorous pre-university 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.

The IB Diploma program is available in English, French and Spanish. At SAS the program is offered in English. 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. Students may opt out of Art for another 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 and some more broadly. SAS will add or delete courses and offer some courses at HL or SL according to student demand and staff availability.

## Additional IB Diploma Requirements

The program offers special features in addition to the six subjects of the curriculum that is 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 biases, 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)

Participation in the school's Creativity, Activity, and Service (CAS) program is intended to develop a student's creative, artistic and physical well being. The CAS requirement seriously considers the importance of life outside the world of scholarship, providing a refreshing counterbalance to the academic self-absorption some may feel within a demanding school program. It also considers seriously the goals of educating the whole person and fostering more compassionate citizenship. Through participation in CAS activities, students are encouraged to share their energies and special talents, while developing awareness, concern and the ability to work cooperatively with others.

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


## IB Courses Online

SAS is proud to offer even greater curriculum opportunities to our students. Where a clear need exists we are 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 courses will be offered through Pamoja, an approved provider of IB courses online. Pamoja currently offers IB online courses to more than 2000 students in 450 schools world wide. They employ 80 qualified experienced IB teachers.

The IB coordinator and the school counselors will guide students. Final approval to take an online course rests with the IB Coordinator. As with all other IB courses we offer, this is a two-year course.

Due to the cost of a Pamoja course, should a student choose to drop a Pamoja course, his or her parents are responsible for reimbursing the school for the cost of the course.

## Why would a student take a course online?

- They may have a unique interest or passion to study a course that we do not currently offer
- 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, studying online is avaiable option
- Other extenuating circumstances, including students transferring part-way through the diploma


## How will the student be supported in school?

- Subject expertise is offered by the online tutor
- Appropriate study space will be available


## What about assessments?

- Assessments throughout the two-year course will be set and graded by the Pamoja tutor.
- Final IB Exams at the end of the two year course will be managed by SAS as with other IB students.

Here is a sample Philosophy course description from Pamoja:
What is IB Philosophy SL?
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? You will learn how to think systematically, analyze arguments, and study philosophical themes. You will also be looking at problems facing contemporary society, including those resulting from increased international interaction.

## What is different in taking IB Philosophy SL online?

By taking IB Philosophy SL online you will have:

- Have access to source material in a variety of media
- The chance to learn at your own pace
- The experience of learning with students from around the world in a truly global classroom.
- The opportunity to exchange ideas with people from very different philosophical backgrounds.

Some things won't be different though. Expectations and standards are just as high as in a face-to-face classroom.

What topics does IB Philosophy SL cover?
IB Philosophy covers major philosophical themes such as moral values, relativism, and utilitarianism as well as major philosophical thinkers such as Plato, Socrates, Hegel and Iris Murdoch.

You will also look at questions such as: are human beings special? Are we free and are human beings naturally selfish? You will also get the chance to study an optional theme of your own choice.

How much time a week will I need to set aside for this course? Between five and six hours a week.

What kinds of activities are in the course and how will they be assessed? Watching videos, reading notes, independent research, listening to podcasts by leading philosophers, writing personal reflections, essay writing, analyzing and evaluating texts, exam practice, watching movie clips (authentic examination preparation) external websites, online discussions with classmates, quizzes

What are the technical requirements for this course?
Hardware and software requirements:

- Computer - (Windows or Mac PC)
- Browser - Google Chrome (recommended) with Flash player installed and JavaScript enabled
- Access to a printer and scanner
- Access to YouTube

What help will I get if I am finding the course difficult?
You will receive just as much support in a Pamoja online course as you will in a face-to-face classroom.

Your support will include:

- Regular contact with your teacher by instant messaging, email and web sessions
- Support from your site based coordinator
- Support from Pamoja's delivery and development teams
- A cohort of classmates in a similar situation to communicate with
- Access to communication tools, discussion forums and a blog

Pamoja Courses:

- English L\&L HL and SL
- French ab initio SL
- Mandarin ab initio SL
- Spanish ab intio SL
- Spanish B SL
- Business management HL and SL
- Economics HL and SL
- Information technology in a global society HL and SL
- Philosophy SL
- Psychology HL and SL
- Math Analysis \& Approaches HL and SL
- Math Applications and Interpretation HL and SL
- Film SL


## GLOBAL ONLINE

ACADEMY

## GOA 2024-2025 Student Course Catalog

## GOA students are modern learners.

The mission of Global Online Academy (GOA) is to reimagine learning to enable students to thrive in a globally networked society. GOA provides a positive, interactive, and academically rigorous environment for students to learn. We offer courses that connect students to topics they care about, and we offer a network that connects students to peers as passionate as they are.

As GOA learners, our students also develop a specific set of skills, skills that might not be exercised as often in a bricks-and-mortar environment. Based on our research, student surveys, and feedback from our faculty, we have identified the following six core competencies that our students develop in practical, hands-on ways, no matter which GOA course they take:

1. Collaborate with people who don't share your location.
2. Communicate and empathize with people who have perspectives different from your own.
3. Curate and create content relevant to real-world issues.
4. Reflect on and take responsibility for your learning and that of others.
5. Organize your time and tasks to learn independently.
6. Leverage digital tools to support and show your learning.

Students will need to complete an application from the counseling office and return it. Once they are approved, students will select course preferences (first choice, second choice, etc.) for first semester and second semester. Each GOA course is a semester long.

To view the 2024-2025 GOA course offerings, login into Schoology to access this link: https://saschina.schoology.com/template/6465257446

## SAS Online Course



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 others are offered for a full year. You can peruse the courses available in the VHS Course Catalog at https:// my.vhslearning.org/PublicStudentCourseList.aspx.

SAS students may take a maximum of seven courses in any semester, including a VHS course. 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 to decide if an online course is right for them. Students should then meet with their 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. Students will be informed whether or not their request has been approved later in the spring. Priority for VHS courses will be given to students with schedule conflicts and students who are requesting courses not offered at SAS.

If you are interested in taking an online course, please review the catalog (https://my.vhslearning.org/PublicStudentCourseList.aspx) 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.

[^2]Due to the cost of GOA, Pamoja, and VHS courses, should a student choose to drop a GOA, Pamoja, or VHS course, his or her parents are responsible for reimbursing the school for the cost of the course.


## SAS

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.

2021-2022 was the inaugural year for The Innovation Institute at SAS Pudong. Current Innovation Institute ninth graders will continue into the tenth grade Inno program. Eighth grade families will be invited to apply to participate in the spring. Qualifying applications will be placed in a lottery to determine the makeup of the first ninth grade cohort. Cohorts will range from 20-30 students in size at first, and will be required to complete the two-year sequence of Innovation courses. Our first Inno cohort will be graduating in 2025.

The Innovation Institute is founded on four core principles.

1. Provide a 21 st 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 Ivan Velasco at ivan.velasco@saschina.org


## ENGLISHCOURSES

## 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:

## AP English Language \&

Composition
IB English A:
Literature SL/HL Y1
(two-year course)

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

AP English Language \&
Composition
AP English Literature \& Composition

IB English A:
Language \& Literature SL/HL Y2 (two-year course)

## INTRODUCTION

The English department seeks to prepare students to be critical thinkers, readers, and writers; our program is designed to rigorously prepare students for both the IB and AP courses we offer, as well as to prepare students for the rigors of collegiate writing. Students must take four years of English as an SAS graduation requirement.

## COURSE OF STUDY

All grade 9 students will be enrolled in English 9; this is a general survey course, with a focus on academic literacy, academic writing, and research.

All grade 10 students will be enrolled in English 10; this is a general survey course, with the focus on American Literature, literary analysis, and preparation for IB and AP coursework.

Grade 11 students have a variety of course options:

- Grade 11 students who are not taking IB or AP coursework must enroll in English 11.
- Students in the IB Diploma Program may enroll in IB A Language and Literature or IB A Literature. Both courses are offered at standard and higher level. Non-diploma students may take either course as a certificate course; the time commitment is two years long.
- Students may take AP English Language and Composition.

Grade 12 students have a variety of course options:

- Grade 12 students not enrolled in AP or IB coursework must enroll in English 12.
- Students who were enrolled in IB A Language and Literature or IB A Literature must enroll in the second year of that course.
- Students may take AP English Language and Composition.


## English 9

Course Code: 1000
Duration: Year
Prerequisites: None
Credits: 1.0
This is a foundational English course aligned with the Common Core standards in which 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 including research and formatting the essay. Oral communication skills are developed through participation in seminars, discussions, and oral/ dramatic presentations.

## English 10

Course Code: 1001
Duration: Year
Prerequisites: English 9
Credits: 1.0
English 10 is aligned with the Common Core standards in which students study a wide range of historical and contemporary literature with a focus on American literature but not limited to this, covering at least four of the following genres: novel, short story, poetry / lyrics, 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 enhance their analytical skills by exploring a variety of writing styles and forms both literary and visual. Students' oral communication skills are developed through participation in seminars, discussions, seminars and discussions in both formal and informal settings.

## English 11

Course Code: 1002
Duration: Semester Prerequisites: English 10
Credits: 1.0
English 11 is a US-Common-Core-aligned course designed to build on the skills developed in English 10 and to serve as a bridge to English 12 or AP English Language. There is a heavy focus on academic writing (literary analysis, literary argument, research / synthesis, etc.); however, students will also explore creative writing as they produce their own texts in relationship to the course's units of study (humor, individualism, colonialism, etc.). Students will read literature from around the world and expand their idea of what "text" means. Students will expand their oral communication skills via seminars, discussions, and presentations, both formal and informal.

## English 12

Course Code: 1003
Duration: Semester
Prerequisites: English 11
Credits: 1.0
English 12 will foster in senior students independent learning. The course will enable students to design and create a self-directed project of personal interest. Core curriculum will include creative non-fiction, comedy and satire, and use of narrative language in conjunction with students' own focus on independent projects. This course will also center on developing an understanding and ability to interpret visual text. Students will hone presentation skills based on a variety of models, and create a personal portfolio. The course is designed to prepare students to read and write at a college/university level.

## AP English Language \& Composition

Course Code: 1200
Duration: Year
Prerequisites: English 10
Credits: 1.0
A student in AP English Language and Composition is expected to enter with the general skils necessary to handle a high-level composition course and to leave with the sophisticated reading and writing ability of a student at the end of his/her first year of college. Reading selections are largely nonfiction from the 16th century to the present, and encompass a range of styles and purposes: argumentative, expository, analytical, personal, even creative. Students will learn to recognize and analyse authors' stylistic and rhetorical strategies, and to apply those strategies in ttheir own writing. A high degree of responsibility for class participation and independent learning is expected from students. AP Language and Composition prepares students from AP exam; all students enrolled must sit the College Board exam in May.

## AP English Literature \& Composition

Course Code: 1201
Duration: Year
Prerequisites: AP Language and Composition (highly recommended) or English 11
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, tone, etc. 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, students will consider the social and historical values it reflects and embodies. 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 in an AP subject must sit the external exam at the end of the school year.

## IB English A: Literature SL/HL Y1-Y2

Course Codes: SL Y1 1110/ HL Y1 1130/ SL Y2 1120/ HL Y2 1140
Duration: Year
Prerequisites: English 10
Credits: 1.0
Over two years, students in IB English Literature have the opportunity to study and analyze a wide range of classic and contemporary texts in genres such as novels, poetry, short stories, essays, drama, etc. The course will develop critical and analytical reading, writing, and discussion skills, providing students with a framework for analyzing texts in a sophisticated manner. Students will study connections between an author's language and meaning and between a work and its historical context. You are taught not only how to analyze but also how to think about the texts, what they are about, how they work and what significance they have in the world. With a focus on fiction, this course is best suited for students with an interest in the literature of various time periods, places, and genres. All students enrolled in an IB subject must sit the external exam at the end of year 2.


IB English A: Language \& Literature SL/HL Y1-Y2
Course Codes: SL Y1 1111/ HL Y1 1131/ SL Y2 1121/ HL Y2 1141
Duration: Year
Prerequisites: English 9 and English 10
Credits: 1.0
Over two years, students in IB Language and Literature will study literature, nonfiction, and language usage. An unconventional look at both traditional and untraditional 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
- Preparation for university-level writing for a variety of majors
- 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

Since this course will study literary and nonliterary texts, it best suits students who love literature and are interested in thinking about language in new ways. All students enrolled in an IB subject must sit the external exam at the end of year 2.


## 2024-2025 HIGH SCHOOL COURSE CATALOG

## SOCIALSTUDIES 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 <br> (Open to Gr. 10,11,12) | Modern World <br> History <br> (Open to Gr. 10,11,12) | AP Human Geography <br> (Open to Gr. 10,11,12) | AP US History <br> (Open to Gr. 10,11,12) | AP World History <br> (Open to Gr. 10,11,12) |
| :---: | :---: | :---: | :---: | :---: |

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



## Legend



Psychology SL/HL (two-year course)

## INTRODUCTION

The goals of the Social Studies Department are for students to gain an appreciation of cultural diversity, an overview of history (Asian, US, and/or world), and an understanding of contemporary issues. They will develop an awareness of the economic, social, political, and environmental interdependence of all nations and peoples.

Through their coursework in social studies classes, students will master skills in locating, compiling, and weighing evidence, in examining their values, and in formulating a personal philosophy. They will be able to recognize contributions of past and present cultures by incorporating them into a commitment to equal rights and opportunities.

They will acquire knowledge of their role in today's world and their place in the world of the 21st century. In addition, students will gain skills in critical thinking, problem solving, research, and communication.

Students must take at least three credits in social studies in order to fulfill graduation requirements. Grade 9 students are required to enroll in Asian History. In grade 10, students may choose between a US History survey course, a Modern World History survey course, AP World History, or AP US History.

Students in grades 11 and 12 may choose any of those courses open to grade 10 students; in addition, grade 11 and 12 students can elect to take a variety of courses, including AP and IB level courses, in fields such as economics, history, government, law, psychology.

## Asian History

Course Code: 2000
Duration: Year
Prerequisites: None
Credits: 1.0
This course is aligned with the C3 Social Studies Framework and designed to develop students' understanding of the political, economic, cultural, and social forces that shape society with an strong focus on Asia. Students will develop skills in writing, critical thinking, research, source analysis, and effective communication through various types of assessments. Asian History provides students with opportunities to explore topics related to the history of Asia that also overlap with their own interests while developing the skills needed for a successful transition to grade 10.

## Modern World History

Course Code: 2001
Duration: Year
Prerequisites: None
Credits: 1.0
This world history course will cover the patterns and processes that shaped today's world by thematically covering history from the Enlightenment to the present. Semester one will focus on revolutionary change in ideas, politics, and economics. Semester two's theme is conflict and change in the 20th century. Throughout the course students will develop both their historical thinking and trans disciplinary skills and be asked to connect their learning to present day issues. Students will be encouraged to think as historians by researching and critically evaluating sources in order to develop and support arguments and then communicate these evidencebased arguments through written and oral forms including participation in discussions, mock trials, and debates.

## US History

Course Code: 2002
Duration: Year
Prerequisites: None
Credits: 1.0
US History is a survey course that begins with a study of the Constitutional foundations of the United States Government, which are influential to the history and development of the country. Students will become familiar with the geography and founding principles which influence the United States as a global leader in the world economy. Throughout much of the second semester, students will analyze through a variety of resources and methods, the evolution of the United States' industrial and economic power, and how this affected future political, economic, and social decisions. All efforts will be made to teach students to think more critically as well as provide them with the skills that will enable them to move on to the next level, exploring ways to foster creativity through project based learning.

## Sociology

Course Code: 2009
Duration: Year
Prerequisites: None
Credits: 1.0
This year-long elective course introduces students to the basic tenets of sociology. Students learn about socialization, characteristics of groups, inequality, ethnicity, gender, and social deviance. Students reflect on their own social situations while learning about social theory and thinkers who have influenced the field. There is an emphasis on understanding the self in relation to social forces, patterns and problems.

## AP US History

Course Code: 2202
Duration: Year
Prerequisites: Teacher recommendation
Credits: 1.0
This intensive survey 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 class, and students should approach it with high expectations for themselves. Thematically, the course will attempt to address the major historical and political questions of US history. Class activities will address, but not be limited to seminar discussion, debate, document analysis, and writing skills development. All students enrolled in an AP subject must sit the external exam at the end of the school year.


## AP Psychology

Course Code: 2203
Duration: Year
Prerequisites: Teacher recommendation
Credits: 1.0
AP Psychology offers a course and examination in psychology to qualified students who wish to complete studies in secondary school equivalent to an introductory college course in psychology. The exam presumes at least one semester of college-level preparation. AP Psychology course is designed to introduce students to the scientific study of the behavior and mental processes of human and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Economics

Course Code: 2204
Duration: Year
Prerequisites: Teacher recommendation
Credits: 1.0
AP Economics is designed to prepare students for the administration of the AP Exam in microeconomics and macroeconomics. This one-year course is divided into two parts. Microeconomics is taught during the first semester while macroeconomics is taught during the second semester. The purpose of an AP course in economics is to give students a thorough understanding of 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, the study of national income and pricelevel determination, and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. The course content and the requirements are the equivalent of micro and macro introductory courses taught at the college and university level. Students will be expected to apply quantitative and mathematical skills to economics. Students will also be expected to apply economic logic to a wide variety of real world and hypothetical situations. All students enrolled in this AP subject must sit both external exams at the end of the school year.

## AP World History

Course Code: 2206
Duration: Year
Prerequisites: Teacher recommendation
Credits: 1.0
Advanced Placement World History is a college-level course in World History covering the period from 1200 C.E to present. The AP World History course offers motivated students the opportunity to immerse themselves in the processes that, over time, have resulted in increasing interactions between various cultures. The approach of the course is chronological in nature; however, students will continually monitor current events and attempt to place these "current" events into a historical context. AP World History offers an approach that lets students "do history" by guiding them through the steps a historian would take in analyzing historical events and evidence worldwide. Furthermore, the AP World History course requires students to engage with the dynamics of continuity and change across the historical periods. Analyzing the processes and causes involved in these continuities and changes are vital in understanding the past. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Human Geography

Course Code: 2207
Duration: Year
Prerequisites: Teacher Recommendation
Credits: 1.0
AP Human Geography presents high school students with the curricular equivalent of an introductory college-level course in human geography or cultural geography. Content is presented thematically rather than regionally and is organized around the discipline's main subfields: economic geography, cultural geography, political geography, and urban geography. The approach is spatial and problem oriented. Case studies are drawn from all world regions, with an emphasis on understanding the world in which we live today. Historical information serves to enrich analysis of the impacts of phenomena such as globalization, colonialism, and humanenvironment relationships on places, regions, cultural landscapes, and patterns of interaction. All students enrolled in this AP subject must sit both external exams at the end of the school year.

## IB Economics SL/HL Y1-Y2

Course Codes: SL 2114 (Y1), 2124 (Y2); HL 2134 (Y1), 2144 (Y2) Duration: 2 years
Prerequisites: Open to grade 11 and grade 12 students Credits: 2.0
The IB Economics course provides students with a comprehensive understanding of the intricate and interconnected nature of economic activity in our rapidly changing world. Emphasizing the centrality of scarcity, the course aims to develop students' critical understanding of economic theories, models, ideas, and tools in microeconomics, macroeconomics, and the global economy. Through the application of these theories, students analyze economic data to engage with real-world issues and gain a conceptual understanding of individuals' and societies' economic choices. The course highlights include exploring the impact of economic decisions on individuals and societies, fostering awareness of personal responsibilities at local, national, and international levels. With a focus on key concepts such as scarcity, choice, efficiency, equity, sustainability, and more, IB Economics equips students with the knowledge, skills, values, and attitudes necessary to act responsibly as global citizens. The dynamic and intellectually demanding nature of the course encourages critical thinking, analytical skills, and the application of economic theories to real-world scenarios, preparing students to navigate the complexities of the global economy and make informed, responsible choices in an interconnected world.

## IB Business Management SL/HL Y1-Y2

Course Codes: SL Y1 2117/Y2 2127; HL Y1 2137/Y2 2147
Duration: 2 years
Prerequisites: Open to grade 11 and grade 12
Credits: 2.0
Business management is a rigorous, challenging and dynamic discipline in which students study business functions, management processes and decision-making in contemporary contexts of strategic uncertainty. It examines how business decisions are influenced by internal and external factors, and how these decisions impact upon stakeholders. Business management also explores how individuals and groups interact within an organization, how they may be successfully managed and how they can ethically optimize the use of resources in a world with increasing scarcity and concern for sustainability. Students learn to analyse, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate. Emphasis is placed on strategic decision-making and the operational business functions of human resource management, finance and accounts, marketing and operations management. Through the exploration of six concepts underpinning the subject (change, culture, ethics, globalization, innovation and strategy), the business management course allows students to develop their understanding of interdisciplinary concepts from a business management perspective.

## IB Psychology SL/HL Y1-Y2

Course Codes: SL Y1 2113/ HL Y1 2133/ SL Y2 2123/ HL Y2 2143
Duration: 2 years
Prerequisites: Open to grade 11 and grade 12 students
Credits: 2.0
IB Psychology examines the interaction of biological, cognitive, and socio-cultural influences on human behavior, thereby adopting an integrative approach. Students will learn how psychological knowledge is generated, developed and applied. In the second year students have the option of studying either abnormal, developmental, or health psychology or the psychology of human relationships. SL students will take one option, while HL students study two of the topics. All students will complete an internal assessment research replicating an experiment, and complete two external papers. HL students will complete a third external assessment.

## IB Environmental Systems and Society SL Y1-Y2

Course Codes: SL Y1 4115/ SL Y2 4125
Duration: 2 years
Prerequisites: Open to grade 11 and grade 12 students Credits: 2.0
ESS is a multidisciplinary course that provides students with the methodology, techniques and knowledge associated with science and humanities subjects. As a result, students can benefit greatly from studying ESS alongside subjects such as History or Biology. The course allows students to explore the structure and function of environmental systems and the cultural, economic, ethical political and social interactions between societies and the environment. At the end of the course, students will be equipped to respond to a wide range of environmental issues that they will inevitably come to face. Topics in this course include environmental value systems; ecosystems and ecology; biodiversity and conservation; soil; food production systems; and climate change and energy production. Fieldwork and other experimental work are an integral part of the course, some of which may be extended beyond the normal school schedule. All students enrolled in an IB subject must sit the external exam at the end of year 2.

## IB Global Politics SL/HL Y1-Y2

Course Codes: SL Y1 2153/ HL Y1 2163/ SL Y2 2154/ HL Y2 2164
Duration: 2 years
Prerequisites: Open to grade 11 and grade 12 students
Credits: 2.0
Global Politics enables students to critically engage with different and new perspectives and approaches to politics through exploring the impact on individuals and societies of complex global political challenges created by rapid change and increasing interconnectedness. Students are asked also to critique their role in the world as active global citizens.

This course explores the fundamental political concepts such as power, equality, sustainability and peace in a range of contexts. It allows students to develop an understanding of the local, national, international and global dimensions of political activity and processes, as well as to explore political issues affecting their own lives. An aspect of this course is the Engagement Activity. This activity requires both SL and HL students to actively apply the concepts, theories and ideas of this course as part of investigating specific issues that they are passionate about. In addition, HL students are also required (through a case studies approach) to examine and evaluate political challenges. All students enrolled in an IB subject must sit the external exam at the end of year 2.

## MATHEMATICS COURSES

Mathematics Department Flow Chat


Pudong Class of 2029 - Students entering IM1 in $9^{\text {th }}$ grade (from Math 8 or external students)


## INTRODUCTION

The mathematics curriculum at Shanghai American School is designed to meet the needs of students who have varying levels of mathematical background, knowledge, and abilities, with diverse interests and career goals.

The three main goals of the mathematics program are as follows:

1. To challenge students while developing mathematical skills
2. To develop an attitude toward mathematics that encourages subsequent learning and application of mathematical concepts and skills
3. To develop in students an understanding of the important role of mathematics in society.

## Mathematics Course Offerings

The mathematics department offers a rich variety of programs, including both Advanced Placement (AP) and International Baccalaureate (IB), to meet the needs of its diverse student body.

College bound students who plan to enter fields that do not necessarily require a very strong mathematics background can take a sequence of courses that may include Integrated Mathematics 3, IB Mathematics Application and Interpretation SL, or Statistical Math. College-bound students who plan to enter fields requiring a very strong foundation in higher mathematics (e.g., engineering, pure sciences) can take a sequence of courses which could include Integrated Mathematics 3+, Advanced Pre-Calculus, and either AP Calculus (AB or BC) and/or AP Statistics or IB Mathematics Analysis and Approaches HL. Please note that students may need to meet specific math course or credit requirements for admission to a particular post-secondary institution or college program. Students are recommended to seek the advice of their college counselor and research individual institutions and programs for specific guidelines and up-to-date information.

All SAS students are encouraged to take mathematics during all four years of high school. However, only three years of mathematics (3 credits) are required for graduation.

## New Student Placement Procedure

A student's math placement and subsequent course sequence may be based on the following:

- The student's performance on the SAS math placement test
- Recommendation from the current or previous math teacher
- The student's grades in previous and/or current math courses
- The recommendation from the SAS high school math department and counselor.


## Math Course Prerequisites

Students must meet the prerequisites to enroll in any math course. Students who do not meet the prerequisites should discuss options with their current teacher and counselor. Details regarding this process are outlined in the Student Handbook.

## Note:

1. All students are required to complete three credits of mathematics in order to graduate. One credit equals a year-long high school course. One semester of successfully completing a math course equals half a credit.
2. All students who do not already own a graphing calculator should purchase a TI Nspire calculator.
3. All students enrolled in an AP mathematics course must sit the external (AP) exam in May of the current academic year.
4. All students enrolled in an IB mathematics course must sit the external (IB) exam at the end of year 2.

## Integrated Math 1 (IM1)

Course Code: 3203
Duration: Year
Prerequisites: Pre-Algebra equivalent Credits: 1.0
SAS offers an integrated math program based on the US Common Core standards. Integrated Math 1 (IM1) 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 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: 3205
Duration: Year
Prerequisites: Integrated Math 1
Credits: 1.0
This 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 2+ (IM2+)
Course Code: 3205A
Duration: Year
Prerequisites: Integrated Math 1 or equivalent
Credits: 1.0
This is the second course of the Integrated Mathematics progression based on Common Core State Standards, but the content of the regular Integrated Math 2 course will be explored at a deeper level and the course also covers additional content. The 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 idea 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. Students will also apply these main ideas in new and different contextual settings. In addition, this course contains an introduction to polynomial, rational functions and the unit circle. Other topics include matrices, parametric equations, advanced probability and counting and conic sections.

## Integrated Math 3 (IM3)

Course Code: 3207
Duration: Year
Prerequisites: Integrated Math 2 or equivalent
Credits: 1.0
This 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+ (IM3+)

Course Code: 3208
Duration: Year
Prerequisites: Integrated Math 2 or equivalent
Credits: 1.0
This 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.

## Statistical Math

Course Code: 3007
Duration: Year
Prerequisites: Successful completion of any two year-long high school math courses
Credits: 1.0
This course will survey elementary topics from modern mathematics, with an emphasis on real-world applications. Topics will be selected from graph theory (with applications to networks, planning and scheduling, traveling salesman problems), the mathematics of social choice (voting methods, Arrow's Impossibility Theorem, measurements of power and influence, fair division problems) and elementary statistics (polling and confidence intervals, basic hypothesis testing). This course is for students who want or need another math course but who do not intend to engage in advanced studies requiring mathematics at the college level. Note: The offering of this course is subject to student enrollment.

## Pre-Calculus

Course Code: HS3011
Duration: Year
Prerequisites: IM3 or IM3+
Credits: 1.0
Pre-Calculus is not a specific, discrete study in mathematics, but rather a course that focuses upon establishing the student's knowledge and skills in preparation for undertaking more advanced math studies. While many of the topics introduced in previous math courses are revisited, they are covered in greater depth and breadth. Included are more challenging studies of polynomial, rational, radical, exponential, logarithmic, and trigonometric functions, the study of conic sections, linear programming, and matrices. A graphing calculator is required and integral to the course as methods of solution include algebraic, numeric and graphical approaches.

## AP Pre-Calculus

Course Code: 3012
Duration: Year
Prerequisites:
Credits: 1.0
In AP Precalculus, students explore everyday situations and phenomena using mathematical tools and lenses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple representations. Students study each function type through their graphical, numerical, verbal, and analytical representations and their applications in a variety of contexts. Furthermore, students apply their understanding of functions by constructing and validating appropriate function models for scenarios, sets of conditions, and data sets, thereby gaining a deeper understanding of the nature and behavior of each function type.

Through the course, students strengthen their procedural and symbolic fluency skills needed for higher level mathematics. While studying each function type, students solve equations and construct equivalent analytic representations in both contextual and purely mathematical settings. (Adapted from the College Board website.).

## AP Calculus AB

Course Code: 3200
Duration: Year
Prerequisites: A grade of B- or above for both semesters in
Advanced Pre-Calculus
Credits: 1.0
This course explores the major topics required for AP Calculus $A B$, and is equivalent to the first semester of a traditional college calculus course. Topics include limits, derivatives of algebraic and transcendental functions, differentiation techniques, optimization, related rates, Riemann sums and the definite integral, indefinite integrals and antidifferentiation, numerical integration, areas of planar regions, and volumes of solids of revolution. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Calculus BC

Course Code: 3201
Duration: Year
Prerequisites: A grade of B+ or above for both semesters in
Advanced Pre-Calculus
Credits: 1.0
This course is an accelerated version of AP Calculus $A B$ to allow completion of the $B C$ syllabus in one year. This course is equivalent to the first two semesters of a traditional college calculus course. Topics include those listed in AP Calculus AB plus the additional BC-level topics: improper integrals and further applications of integrals, differential equations and Euler's Method, L'Hopital'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. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Statistics

Course Code: 3202
Duration: Year
Prerequisites: With departmental approval this course may be taken concurrently with Advanced Pre-Calculus.
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 a less traditional math course in that the major emphases are reading, writing, comparing and contrasting, conceptual understanding, interpretation and judgment, and analysis. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## Multivariable Calculus

Course Code: 3204
Duration: Year
Prerequisites:
Credits: 1.0
Unlike AP Calculus AB and AP Calculus BC in which students study calculus of a single variable, Multivariable Calculus, a rigorous college course, focuses on functions of two or more independent variables. The concepts studied in this course are applied in many different fields - thermodynamics, electricity and magnetism, economics, modeling fluid or heat flow, etc. The topics included are vectors and the geometry of space, vector-valued functions, functions of several variables, multiple integration, vector analysis, and second order differential equations. A graphing calculator is required.

## IB Mathematics:

## Application and Interpretation SL Y1-Y2

Course Codes: SL Y1 3113/Y2 3123
Duration: 2 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 NSpire calculator.

## IB Mathematics:

## Application and Interpretation HL Y1-Y2

Course Codes: HL Y1 3133/Y2 3143
Duration: 2 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 NSpire calculator.


## IB Mathematics:

## Analysis and Approaches SL Y1-Y2

Course Codes: SL Yi 3114/Y2 3124
Duration: 2 Years
Prerequisites: 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 NSpire calculator.

## IB Mathematics:

## Analysis and Approaches HL Y1-Y2

Course Codes: HL Y1 3134/Y2 3144
Duration: 2 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 NSpire calculator.


## SCIENCE COURSES

## Science Department Flow Chart

## All grade 9 students must enroll in:

Physics/Chemistry Lab Science

All grade 10 students must enroll in:

## Biology Lab Science

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


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


| IB Chemistry SL/HL |
| :---: |
| (two-year course) |

Earth \& Space Science
AP Environmental Science

| IB Physics SL/HL <br> (two-year course) |
| :---: |

AP Biology

| IB Biology SL/HL <br> (two-year course) |
| :---: |


| Legend |  |
| :---: | :---: |
| AP course |  |
| IB course |  |
| AP Physics 1 |  |
| AS course |  |
| AP Physics C |  |

IB Environmental System \& Societies SL (two-year course)

## INTRODUCTION

In the Science Department, students are introduced to chemistry, physics, and biology during the first two years in courses that are aligned with the Next Generation Science Standards. In grade 9, students take Physics/Chemistry Lab Science, and in grade 10, students take Biology Lab Science.

Our model gives students the opportunity to experience all three sciences before making their science choices in grades 11 and 12. In order to graduate from SAS, students must earn a minimum of three science credits; most SAS students graduate with at least four science credits. The SAS science curriculum helps students to develop problem-solving, critical thinking, and analytical skills in a lab-based setting. Technology is integrated into the classroom and lab, and is a tool that aids students in data collection, data processing, and communicating their understanding of scientific concepts. The science offerings include a range of courses to provide opportunity for all high school students to develop a variety of skills and interest within the scope of the science disciplines.

Students enrolled in IB courses remain with the same teacher over the course of two years in grades 11 and 12. AP science students must take the AP exam in May.

## Physics/Chemistry Lab Science

Course Code: 4007
Duration: Year
Prerequisites: None
Credits: 1.0
This foundational lab science course focuses on the use of science and engineering practices to develop conceptual understandings in the physical sciences. The course explores foundational chemistry and physics, and the crosscutting concepts that unite them. Students will be challenged to relate these concepts to phenomena beyond the science classroom. 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 focus.

## Biology Lab Science

Course Code: 4008
Duration: Year
Prerequisites: Physics/Chemistry Lab Science
Credits: 1.0
This foundational lab science course focuses on the use of science and engineering practices to develop conceptual understandings in Biology. The course explores foundational Biology, and the crosscutting concepts that unite the subject. Students will be challenged to relate these concepts to phenomena beyond the science classroom. 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 life science focus. The four topics covered in the course are:

- structure and process
- heredity
- biological evolution
- ecosystems


## Chemistry

Course Code: 4004
Duration: Year
Prerequisites: Open to grade 11 or grade 12
Credit: 1.0
This class provides opportunities for a yearlong study of chemistry in a way that is stimulating and challenging. Students will learn important scientific concepts and laboratory methods and be able to apply and use them in a variety of contexts. The major topic studied are measurement and data processing, stoichiometry; atomic theory; periodicity; bonding; energetics; acids and bases; oxidation and reduction. Hands-on laboratory work is an important part of the course where students will learn to construct, analyze, and evaluate their own experimental designs and procedures. This class prepares students for college chemistry and is a prerequisite for AP Chemistry in grade 12. The use of computer and web-based technologies is emphasized in this course.

## Earth \& Space Science

Course Code: 4029
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. It also explores cross-cutting concepts that unite the sciences and allows students to make connections beyond the sciences. Each student will also be required to complete a project with an earth and/or space science conceptual focus.

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.


## AP Biology

Course Code: 4200
Duration: Year
Prerequisites: Biology or Chemistry and teacher recommendation; alternatively, it is recommended that students enrolled in AP Biology take regular Chemistry concurrently.
Credits: 1.0
The AP Biology course is designed to be the equivalent of an introductory course taken by Biology majors during their first year of university. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and demonstrate biology as a process through investigation. The course is organized around four big ideas (Evolution, Energetics, Information storage and Transmission \& Systems Interactions) that provide conceptual links across the biology curriculum. The subject material consists of these topics: Chemistry of Life, Cell Structure and Function, Cellular Energetics, Cell Communication and Cell Cycle, Heredity, Gene Expression and Regulation, Natural Selection/Evolution \& Ecology. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Chemistry

Course Code: 4201
Duration: Year
Prerequisites: Requires one year of General Chemistry, one advanced math course (either AP Calculus, Calculus, or IB HL Math), and teacher recommendation.
Credits: 1.0
This year-long course is designed to be the equivalent of a general chemistry course taken during the first year of university, with focus on data analysis, evaluation and the study of evidence for major chemical principles, especially at the particulate level. Topics and laboratory skills covered are aligned with the Course and Exam Description as prescribed by the College Board. Major emphasis is on the structure of matter and bonding, intermolecular forces and interactions, chemical reactivity and reaction rates, equilibrium principles, thermodynamics, and electrochemistry. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Physics 1

Course Code: 4210
Duration: Year
Prerequisites: IM3 or IM3+
Credits: 1.0
Students will learn and explore through discussions, simulations, and lab work while incorporating various forms of technology and digital media. The course provides a thorough introduction to kinematics, Newtonian mechanics including uniform circular motion, mechanical energy including work and power, rotational mechanics, fluid dynamics and simple harmonic motion. AP Physics 1 is a prerequisite for AP Physics $C$.

## AP Physics C: Mechanics, AP Physics C: Electricity \&

## Magnetism

Course Code: 4206
Duration: Year
Prerequisites: AP Physics 1
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 year-long 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.

## AP Environmental Science

Course Code: 4203
Duration: Year
Prerequisites:
Credits: 1.0
This class provides students with an understanding of the environment that is based on the underlying principles of science. Though the science of environmental issues will be stressed, this course will help students appreciate how science, economics, politics, and social issues all play a part in the development of American environmental policies and international case studies. Students will also develop an appreciation of American and international relationships and agreements. Issues studied include: ecosystems, biodiversity, populations, earth systems, land and water use, energy, pollution, and global change. All students enrolled in an AP subject must sit the external exam at the end of the school year.

## IB Biology SL/HL Y1-Y2

Course Codes: SL Y1 4110/ HL Y1 4130/ SL Y2 4120/ HL Y2 4140
Duration: 2 years
Prerequisites:
Credits: 2.0
IB Biology is one of the group 4 experimental science courses offered through the IB Program. The IB Biology program is separated into two levels, Standard (SL) and Higher (HL). Both levels share a common subject specific core and a collaborative sciences project. The SL course provides students with a fundamental understanding of biology and experience of the associated skills. The HL course requires students to increase their knowledge and understanding of the subject, and so provides a solid foundation for further study at university level. HL students cover additional HL material \& will go into more depth and more rigor in each topic. The new syllabus has been divided into four themes (Unity and Diversity, Form and Function, Interactions and Interdependencies, Continuity and Change) and into four levels of organization (Molecules, Cells, Organisms, Ecosystems). The subject specific core material consists of these topics: Cell Biology, Molecular Biology, Membranes and their functions, Metabolism, Genetics, Ecology, Evolution and Biodiversity, and Human Physiology. All students enrolled in an IB subject must sit the external exam at the end of year two.

## IB Chemistry SL/HL Y1-Y2

Course Codes: SL Y1 4111/ HL Y1 4131/ SL Y2 4121/ HL Y2 4141
Duration: 2 years
Prerequisites:
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 collaborative project. The subject-specific curriculum uses a two-pronged approach to explore structure and reactivity in chemistry. Through these two lenses students will explore atomic structure, chemical bonding models, use of the mole concept for amount of particles, energetics, kinetics, equilibrium, acids and bases, organic chemistry and spectroscopy, reduction and oxidation, uncertainty in measurement. The above curriculum will be taught using a variety of teaching methods including a variety of experimental techniques. In year two, the students will be using those laboratory skills as they conduct an inquiry-based investigation called an internal assessment which will be externally assessed. Students will see how chemistry is called the central science because it has connections will all other areas of science. All students enrolled in an IB subject must sit the external exam at the end of year two.

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 the above subject specific curriculum. Students should expect more class hours and will also spend more time on homework. Mathematical competence is essential for success in HL Chemistry due to the more detailed and in-depth study of the topics.

## IB Environmental Systems \& Societies SL Y1/Y2

Course Codes: SL Y1 4115/SL Y2 4125
Duration: 2 years
Prerequisites:
Credits: 1.0 Science and 1.0 Social Studies credits
ESS is a multidisciplinary course that provides students with the methodology, techniques and knowledge associated with science and humanities subjects. As a result, students can benefit greatly from studying ESS alongside subjects such as History or Biology. The course allows students to explore the structure and function of environmental systems and the cultural, economic, ethical political and social interactions between societies and the environment. At the end of the course, students will be equipped to respond to a wide range of environmental issues that they will inevitably come to face. Topics in this course include environmental value systems; ecosystems and ecology; biodiversity and conservation; soil; food production systems; and climate change and energy production.
Fieldwork and other experimental work are an integral part of the course, some of which may be extended beyond the normal school schedule. All students enrolled in an IB subject must sit the external exam at the end of year two.

## IB Physics SL/HL Y1-Y2

Course Codes: SL Y1 4112/ HL Y1 4132/ SL Y2 4122/ HL Y2 4142
Duration: 2 years
Prerequisites:
Credits: 2.0
IB Physics is regarded as an experimental science that is separated into two levels, Standard (SL) and Higher (HL). Both levels share a common subject specific core and a Collaborative Project. Core topics include space, time, and motion; the particulate nature of matter; wave behavior; fields; nuclear and quantum physics.. Additional topics studied by HL students include extension material in all of these areas. Mathematical competence is essential for success in this course. All students enrolled in an IB subject must sit the external exam at the end of year two.


## SAS HIGH SCHOOL CHINESE LANGUAGE COURSES

## Chinese Department Flow Chart



Note: Full IB Diploma students will be recommended for placement into Mandarin B or Chinese A depending on their proficiency level. Students may then choose between taking their recommended course at the standard or higher level.
$--------1$
May require support and/or summer work

## Legend

## IB course

SAS course

## The SAS Chinese Program

The goal of the Chinese program is to enable students to advocate for self, others and ideas in Chinese in a way that fosters collaboration, enhances global citizenship, challenges established thoughts, and leads to creative ideas. The SAS Chinese program marks progress toward achievement of this goal through ACTFL standards.

## Oral Language

The ability to communicate in oral language is measured through assessments rooted in the Oral Proficiency Interview (OPI) by ACTFL. The OPI measures the language proficiency needed to ensure work readiness for differing types of employment. The OPI assessment measures from Novice (emerging levels of language for a young child or second language learner) to Superior (proficiency that provides a linguistic base for success in careers such as that of a judge, philosopher, or diplomat). The SAS measure of oral language proficiency ranges from Novice to Advanced High. Advanced High includes most aspects of the Superior range skills of the OPI.

## Literacy

Reading comprehension for class placement is standardized by teachers to prepare the students' progress from Novice to Advanced High levels as well as for the IB Language A courses. Writing samples are analyzed by teachers. Writing levels range from entrance to the Novice course, in which students will begin to understand how characters are formed to the Advanced High course in which students narrate and persuade with organized, precise and artistically written language.

## Placement

Students are placed in courses that best represent their skill set and next steps for learning in accordance with standards. The High School program at SAS offers seven levels of Chinese. The SAS course names reflect the ACTFL exit standard of the course.

- Novice
- Intermediate Low
- Intermediate Mid
- Intermediate High
- Advanced Low
- Advanced Mid
- Advanced High


## Language Requirements:

Although SAS requires two global languages credits for graduation, most colleges and universities recommend four years of global languages.

## Novice Chinese

Course Code: HS5024
Duration: Single-year Course
Prerequisites: None
Credits: 1.0
This one-year course is designed to give students a solid base in the foundational aspects of Chinese conversational language and literacy in a character-based language. Successful completion of this course means that students will be able to demonstrate mastery of the following skills:

Oral language: Speakers at the Novice level can answer a variety of familiar questions about topics related to daily life using practiced complete sentences most of the time. When prompted, he/ she can ask a variety of familiar questions.

Reading: At the Novice level, students can use reading strategies such as reference to images, contextual clues, radicals and familiar characters to figure out the meaning of basic text.

Writing: Students can recognize radicals and use proper stroke order to write characters. Students can combine basic characters to form words. Students can independently write practiced patterns of sentences with familiar vocabulary.

## Intermediate Low Chinese

Course Code: HS5025
Duration: Single-year Course
Prerequisites: Successful demonstration of the skills of the Novice course Credits: 1.0
This one-year course is designed to enable students to expand upon their already established foundation of the basic structures of spoken and written Chinese. Successful completion of this course means that students will be able to demonstrate mastery of the following skills:

Oral language: Speakers at the Intermediate Low level can answer a variety of familiar and some limited original questions about his/ her daily life. He/ she is able to ask a variety of questions and talk about topics related to daily life in a series of sentences.

Reading: At the Intermediate Low level, students can use reading strategies such as reference to images, contextual clues, radicals and familiar characters to independently read text with varied sentence length.

Writing: Students can independently write sentences on familiar topics. The length of writing tasks has a word count of 100-150 characters.


## Intermediate Mid Chinese

Course Code: HS5026
Duration: 1-2 year Course
Prerequisites: Successful demonstration of the skills of the Intermediate Low course
Credits: 1.0
This 1-2 year course is designed to enable students to independently converse in Chinese in order to solve basic problems, engage in extended, friendly conversations, and read and write original text within familiar contexts. Successful completion of this course means that students will be able to demonstrate mastery of the following skills:

Oral language: Speakers at the Intermediate Mid level can ask and answer a wide variety of original questions about his/her daily life. $\mathrm{He} /$ she is capable to speak in connected sentences that show originality of thought and the ability to solve authentic problems.

Reading: At the Intermediate Mid level, students can independently read short, non-complex texts that convey basic information and contain multiple sentences with the support of images and contextual clues.

Writing: Students can independently write with well-connected sentences on familiar topics that show variation of character usage. The length of writing tasks has a word count of 150-250 characters.

## Intermediate High Chinese

## Course Code: HS5027

Duration: 1-2 year Course
Prerequisites: Successful demonstration of the skills of the Intermediate Mid course
Credits: 1.0
This 1-2 year course is designed to enable students to independently converse in Chinese in order to solve problems with complications, engage in extended conversations on a variety of topics, and read and write original text that demonstrate access to an expand-ing cultural context and set of ideas. Successful completion of this course means that students will be able to demonstrate mastery of the following skills:

Oral language: Intermediate High speakers can maintain a conversation on a variety of topics of daily life and make connections to topics beyond self. He / she is able to narrate and describe using connected discourse of paragraph length.

Reading: At the Intermediate High level, students can independently read short, non-complex texts that contain prolonged paragraphs with limited support of images and contextual clues.

Writing: Students can independently write in simple paragraphs on a variety of topics with supporting detail that shows variation of sentence structure, logical format, and emerging detail. The length of writing tasks has a word count of 250-350 characters.

## Advanced Low Chinese

Course Code: HS5031
Duration: 1-2 year Course
Prerequisites: Successful demonstration of the skills of the Intermediate
High course
Credits: 1.0
This 1-2 year course is designed to enable students to emerge with conversation and literacy at an academic level. Successful completion of this course means that students will be able to dem- onstrate mastery of the following skills:

Oral language: Speakers at Advanced Low level can maintain a prolonged conversation on a few academic topics in a way that demonstrates sufficient levels of accuracy, development of thought, and precision of vocabulary appropriate to the topic at hand.

Reading: At the Advanced Low level, students can independently read a variety of books containing prolonged text of multiple paragraphs with little support of images or contextual clues.

Writing: Students can independently write a series of paragraph to narrate, inform and state opinion. The text has detail and examples related to the topics. There is some formality of vocabulary. The length of writing tasks has a word count of 400-500 characters.

## Advanced Mid Chinese

Course Code: HS5032
Duration: 1-2 year Course
Prerequisites: Successful demonstration of the skills of the Advanced Low course
Credits: 1.0
This 1-2 year course is designed to enable students to discuss and engage with a wide variety of academic and literary text. Successful completion of this course means that students will be able to demonstrate mastery of the following skills:

Oral language: Advanced Mid speakers can maintain a prolonged and sophisticated conversation on a wide variety of academic topics in a way that demonstrates high levels of accuracy, critical thinking, cultural understanding and precision. Their vocabulary is fairly extensive to the topic at hand.

Reading: At the Advanced Mid level, students can independently read a variety of books of emerging literary interest and differing styles.

Writing: Students can independently narrate, inform or state opinion in writing with specific detail, formality of vocabulary and clear organization. The length of writing tasks has a word count of 500600 characters.

## Advanced High Chinese

Course Code: HS5029
Duration: 1-2 year Course
Prerequisites: Successful demonstration of the skills of the Advanced Mid course
Credits: 1.0
This 1-2 year course enables students to engage in literary analysis across a variety of genres. Successful completion of this course means that students will be able to demonstrate mastery of the following skills:

Oral language: Speakers at the Advanced High level can engage in prolonged philosophical conversations that demonstrate original connections with literature, history and current events in a nuanced and culturally sensitive manner.

Reading: At the Advanced High level, students can engage in literary analysis across a variety of genres.

Writing: Students can narrate, inform or persuade in clearly organized discourse with use of rhetorical questions, quotes, specific details, and use of formal and literary language.

## Superior Chinese

Course Code: HS5147
Duration: 1-2 year Course
Prerequisites: Successful demonstration of the skills of the Advanced High course
Credits: 1.0
This 1-2 year course enables students to engage in literary analysis across a wide variety of genres, characterized by complexity of structure. Successful completion of this course means that students will be able to demonstrate mastery of the following skills:

Oral language: Students demonstrate Superior oral proficiency according to ACTFL standards. This means that a student can tailor language to a variety of audiences by adapting their speech and register in ways that are culturally authentic. At this level, their oral discourse typically resembles written discourse.

Reading: Students can understand a wide variety of texts from many genres including professional, academic, and literary nature. In addition, readers at the Superior level are generally aware of the aesthetic properties of language and of its literary styles. They continue to develop the understanding of the texts in which cultural references and assumptions are deeply embedded.

Writing: Students at this level can produce writing that is sophisticated and directed to sophisticated readers. Writers at this level write to their audience; they tailor their language to their readers.

IB Mandarin Ab Initio SL Y1-Y2
Course Codes: HS5159 (Y1), HS5150 (Y2)
Duration: Two-year Course
Prerequisites: Students with no prior experience with Chinese, or else with skills within the range of the SAS Novice and Intermediate Low courses are recommended for IB AbInitio.
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.

## IB Mandarin B SL/HL Y1-Y2

Course Codes: HS5113 (SL Y1), HS5123 (SL Y2), HS5133 (HL Y1), HS5143 (HL Y2) Duration: Two-year Course
Prerequisites: Students with skills within the range of the SAS Intermediate High and Advanced Low courses are recommended for IB Language B SL. Students with skills within the range of the SAS Advanced Low and Advanced Mid courses are recommended for IB Mandarin B HL. Credits: 2.0
IB Mandarin B SL/HL 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-year Course
Prerequisites: Students with skills within the range of the SAS Advanced High course are recommended for IB Chinese A: Language \& Literature Credits: 2.0
IB Chinese A: Language and Literature SL/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: Two of the IBO assessment tasks for HL are more demanding than those of SL. 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. 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.


Chinese Language Proficiency Level for External Assessments


IB Mandarin B HL

IB Mandarin B SL


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 Mid to 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 Low 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 Mid or above).

## GLOBALLANGUAGES COURSES

Global Languages Department Flow Chart

Students may choose from these courses based on previous course success and results from a language placement exam:


Grade 11 and 12 students may choose from these courses based on previous course success and results from a language placement exam:

| French Novice | IBDP French Ab Initio Y1 | Spanish Novice | IBDP Spanish Ab Initio Y1 |
| :---: | :---: | :---: | :---: |
| French Intermediate Mid | IBDP French Ab Initio Y2 | Spanish Intermediate Mid | IBDP Spanish Ab Initio Y2 |
| French Intermediate High |  | Spanish Intermediate High |  |
| French Advanced Low | IBDP French B SL/HL Y1 | Spanish Advanced Low | IBDP Spanish B SL/HL Y1 |
| French Advanced Mid | IBDP French B SL/HL Y2 | Spanish Advanced Mid | IBDP Spanish B SL/HL Y2 |

## Legend

SAS courseIB course
IBDP courses are two year courses

## INTRODUCTION

The Global Language curriculum is designed to provide the students with an international perspective where the instruction is focused on directing communication (interpersonal, interpretive, and presentational), always within a cultural awareness context. At the same time, students will be able to use the target language to reinforce, and further their knowledge of other disciplines.

Three important goals of the Global Language Department are for students to:

- Use the target language for personal enrichment and enjoyment and to expand knowledge through independent work
- Apply their knowledge of the language to real life contexts and authentic situations
- In a global society, competency in multiple languages increases your marketability

In order to reach these goals, the instructional language will be mostly in the target language.

The curriculum in high school is aligned with the correlated middle school program, as well as the parameters of the International Baccalaureate Program and ACTFL standards, which define what students can do in a foreign language.

Students must meet course prerequisites to enroll in the Global Language program, including the following parameters:

- For new students, a placement test will be given prior the beginning of the school year
- Students who have completed Intermediate Low French or Spanish in SAS middle school, or upon teacher recommendation, may go directly to Intermediate Mid French or Spanish in grade Nine

The Global Language Department offers a variety of educational itineraries, as seen in the flowchart on page 33, including IB courses, such as Language $B$ and Language ab initio. Language A1 self-study is also an option. Although SAS requires two global languages credits for graduation, most colleges and universities recommend four years of global languages.

## Language Requirements:

Although SAS requires two global languages credits for graduation, most colleges and universities recommend four years of global languages.
Je pense, done je suits.

## French Novice

Course Code: 5001
Duration: Year
Prerequisites: None
Credits: 1.0
French Novice is an introductory course that does not require prior knowledge and is designed to provide students with a solid foundation in the French language. Through a combination of interactive lessons, engaging activities, and practical exercises, students will gradually develop their interpretive, interpersonal, and presentational skills.

By the end of the course, students will acquire a command of the French language that will enable them to communicate effectively in basic everyday situations, engage in simple conversations, and continue their journey towards fluency in French.

## French Intermediate Mid

Course Code: 5002
Duration: Year
Prerequisites: French Novice or placement examination Credits: 1.0
In this course, students will keep deepening the interpretive, interpersonal, and presentational skills developed at the Novice level. The course focuses on further expanding their proficiency in French through a combination of interactive lessons, immersive activities, and engaging exercises. By the end of the course, students will acquire a stronger command of French that will enable them to communicate in various real-life situations, express opinions, engage in meaningful conversations, and continue progressing towards better proficiency in the French language.

## French Intermediate High

Course Code: 5003
Duration: Year
Prerequisites: French Intermediate Mid or placement examination Credits: 1.0
The French Intermediate High course aims to develop students' language proficiency in key areas. In terms of interpretation, students will understand and extract key information from short texts and conversations. They will focus on identifying the main idea to enhance their comprehension skills.

The course emphasizes interpersonal communication, where students engage in conversations on familiar and researched topics. They will exchange information, express preferences, and opinions, and provide basic advice. Through these interactions, students will develop their ability to ask follow-up questions and engage in meaningful discussions.

Additionally, students will enhance their presentational skills by telling personal stories, stating viewpoints with supporting easons, and delivering straightforward presentations. These activities will enable students to effectively communicate their thoughts and ideas in French.

## French Advanced Low

Course Code: 5004
Duration: Year
Prerequisites: French Intermediate High or placement examination Credits: 1.0
In the Advanced Low course, students enhance their language skills in interpreting, interacting, and presenting information. They can usually understand and follow the main message in various texts and conversations across different time frames. Students engage in conversations, exchange information, express preferences, opinions, and emotions, and provide advice on familiar and concrete topics they have researched. They can tell stories, state viewpoints, and deliver detailed presentations using a few short paragraphs across different time frames. The course aims to develop student's language proficiency and to strengthen their interpersonal communication skills in French.

## French Advanced Mid

Course Code: 5022
Duration: Year
Prerequisites: French Advanced Low or placement examination Credits: 1.0
The French Advanced Mid-course is designed to enhance students' language proficiency across various time frames. By engaging in interpretive activities, students will gain the ability to grasp the underlying message and supporting details in descriptive informational texts. They will also develop the skills to comprehend the main message and identify key elements in conversations and discussions. The course aims to cultivate strong interpersonal skills in students, enabling them to actively participate in discussions, exchange information, and effectively address unexpected challenges using concise paragraphs. Students will learn to present their viewpoints, using evidence, on concrete academic, social, and professional topics of interest. Through storytelling, they will deliver presentations utilizing well-constructed paragraphs. The course equips students with the necessary tools for achieving academic, personal, and professional success in the French language. mar will be reviewed as necessary for communicative tasks, and exercises and assessments may be given to keep skills honed. Literature and culture are also studied in more depth and organized around thematic units. Students are expected to write essays, analyze literature and diverse texts, and participate in debates and oral activities on a range of subjects. They will be assessed through regular quizzes, tests, and oral presentations.

## IB French Ab Initio Y1-Y2

Course Code: 5151; 5152
Duration: 2 Years
Prerequisites: No more than 9 months of previous study of French is allowed; IB French Ab Initio Year 1
Credits: 2.0
The Ab Initio program is designed to be studied over two years and meets the needs of those IB students who have had little or no opportunity to study the language 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 to the learning of other languages and their speakers and countries. Assessment is per the IBO guidelines. All students enrolled in an IB course must sit the exam at the end of year 2.

IB French B SL Y1-Y2
Course Code: 5110; 5120
Duration: 2 Years
Prerequisites: At least 2 years of academic French; IB French B SL Year 1 Credits: 2.0
This is the study of language acquisition for students whose native language is not French. The aims of the language $B$ program are: to develop students' powers of expression in both oral and written communication; to promote the ability to respond to the language demands of transactional and social contacts; to provide students with an efficient tool for possible further study or job opportunity; to help students to gain insights into how users of the specific language think; and to provide enjoyment and intellectual stimulation. Written and spoken communication will be assessed through internal (school) and external (IBO) assessment. All students enrolled in an IB subject must sit the external exam at the end of year 2.

## IB French B HL Y1-Y2

Course Code: 5130; 5140
Duration: 2 Years
Prerequisites: At least 3 years of academic French; IB French B HL Year 1 Credits: 2.0
This is the study of language acquisition for students whose native language is not French. The aims of the language B program are: to develop students' powers of expression in both oral and written communication; to promote the ability to respond to the language demands of transactional and social contacts; to provide students with an efficient tool for possible further study or job opportunity; to help students to gain insights into how users of the specific language think; and to provide enjoyment and intellectual stimulation. Higher level students will study literature and are held to a higher skill level in all areas. Written and spoken communication will be assessed through internal (school) and external (IBO) assessment. There will be also assessments on literary works in the target language. All students enrolled in an IB subject must sit the external exam at the end of year 2 .

## Spanish Novice

Course Code: 5005
Duration: Year
Prerequisites: none
Credits: 1.0
Spanish Novice is an introductory course that does not require prior knowledge and is designed to provide students with a solid foundation in the Spanish language. Through a combination of interactive lessons, engaging activities, and practical exercises, students will gradually develop their interpretive, interpersonal, and presentational skills.

By the end of the course, students will acquire a command of the Spanish language that will enable them to communicate effectively in basic everyday situations, engage in simple conversations, and continue their journey towards fluency in Spanish.

## Spanish Intermediate Mid

Course Code: 5006
Duration: Year
Prerequisites: Spanish Novice or placement examination Credits: 1.0
In this course, students will keep deepening the interpretive, interpersonal, and presentational skills developed at the Novice level. The course focuses on further expanding their proficiency in Spanish through a combination of interactive lessons, immersive activities, and engaging exercises. By the end of the course, students will acquire a stronger command of Spanish that will enable them to communicate in various real-life situations, express opinions, engage in meaningful conversations, and continue progressing towards better proficiency in the Spanish language.

## Spanish Intermediate High

Course Code: 5007
Duration: Year
Prerequisites: Spanish Intermediate Mid or placement examination Credits: 1.0
The Spanish Intermediate High course aims to develop students' language proficiency in key areas. In terms of interpretation, students will understand and extract key information from short texts and conversations. They will focus on identifying the main idea to enhance their comprehension skills.

The course emphasizes interpersonal communication, where students engage in conversations on familiar and researched topics. They will exchange information, express preferences, and opinions, and provide basic advice. Through these interactions, students will develop their ability to ask follow-up questions and engage in meaningful discussions.

Additionally, students will enhance their presentational skills by telling personal stories, stating viewpoints with supporting reasons, and delivering straightforward presentations. These activities will enable students to effectively communicate their thoughts and ideas in Spanish.

## Dime con quién andas $y$ te díré quién eres.

## Spanish Advanced Low

Course Code: 5008
Duration: Year
Prerequisites: Spanish Intermediate High or placement examination Credits: 1.0
In the Advanced Low course, students enhance their language skills in interpreting, interacting, and presenting information. They can usually understand and follow the main message in various texts and conversations across different time frames. Students engage in conversations, exchange information, express preferences, opinions, and emotions, and provide advice on familiar and concrete topics they have researched. They can tell stories, state viewpoints, and deliver detailed presentations using a few short paragraphs across different time frames. The course aims to develop students' language proficiency and to strengthen their interpersonal communication skills in Spanish.

## Spanish Advanced Mid

Course Code: 5021
Duration: Year
Prerequisites: Spanish Advanced Low or placement examination Credits: 1.0
The Spanish Advanced Mid-course is designed to enhance students' language proficiency across various time frames. By engaging in interpretive activities, students will gain the ability to grasp the underlying message and supporting details in descriptive informational texts. They will also develop the skills to comprehend the main message and identify key elements in conversations and discussions. Furthermore, this course aims to cultivate strong interpersonal skills in students, enabling them to actively participate in discussions, exchange information, and effectively address unexpected challenges using concise paragraphs. Additionally, students will learn to present their viewpoints, backed by evidence, on concrete academic, social, and professional topics of interest. They will acquire mastery in storytelling and deliver compelling presentations utilizing well-constructed paragraphs. The course equips students with the necessary tools for achieving academic, personal, and professional success in the Spanish language.

## IB Spanish Ab Initio Y1-Y2

Course Code: 5155; 5156
Duration: 2 Years
Prerequisites: No more than 9 months of previous study of Spanish is allowed; IB Spanish Ab Initio Year 1
Credits: 2.0
The Ab Initio program is designed to be studied over two years and meets the needs of those IB students who have had little or no opportunity to study the language 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 to the learning of other languages and their speakers and countries. Assessment is per the IBO guidelines. All students enrolled in an IB course must sit the exam at the end of year 2.

## IB Spanish B SL Y1-Y2

Course Code: 5111 (Y1), 5121 (Y2)
Duration: 2 Years
Prerequisites: At least 2 years of academic Spanish
Credits: 2.0
This is the study of language acquisition for students whose native language is not Spanish. The aims of the Language B program are: to develop students' powers of expression in both oral and written communication; to promote the ability to respond to the language demands of transactional and social contacts; to provide students with an efficient tool for possible further study or job opportunity; to help students to gain insights into how users of the specific language think; and to provide enjoyment and intellectual stimulation. Written and spoken communication will be assessed through internal (school) and external (IBO) assessment. All students enrolled in an IB subject must sit the external exam at the end of year 2.

## IB Spanish B HL Y1-Y2

Course Code: 5131 ( Y 1 ), 5141 (Y2)
Duration: 2 Years
Prerequisites: At least 3 years of academic Spanish
Credits: 2.0
This is the study of language acquisition for students whose native language is not Spanish. The aims of the Language B program are: to develop students' powers of expression in both oral and written communication; to promote the ability to respond to the language demands of transactional and social contacts; to provide students with an efficient tool for possible further study or job opportunity; to help students to gain insights into how users of the specific language think; and to provide enjoyment and intellectual stimulation. Written and spoken communication will be assessed through internal (school) and external (IBO) assessment. There will be also assessment on literary works on the target language. All students enrolled in an IB subject must sit the external exam at the end of year 2.

## IB Self-Taught Language A1 SL Y1-Y2 <br> Course Code: 5102 (Y1), 5103 (Y2)

Duration: 2 Years
Prerequisites: Fluency in native language
Credits: 2.0
This is designed as an independent study of literature for students in their native or best academic language, excluding English. Students examine 11 works of literature, five of which must be world literature in translation. The course is designed for students who desire enrichment in the study of literature in a language other than English. The emphasis of the course will be on independent literary analysis and the writing of clear, balanced, well-organized prose in the student's native language. Written and spoken communication will be assessed through internal (school) and external (IBO) assessment. All students enrolled in an IB subject must sit the external exam at the end of year 2.


## VISUAL ARTS COURSES

## Visual Arts Department Flow Chart

## Grade 9 students may choose any ofthe courses below based on meeting prequisites:

## Grade 10 students may choose any ofthe courses below based on meeting prerequisites:

| Photography 1 | Art Foundations | Graphic Design | Digital Film Making |
| :---: | :---: | :---: | :---: |
| Advanced <br> Photography | Studio Art | Advanced Graphic <br> Design 1 | Advanced Digital <br> FIlm Making 1 |

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

| Photography 1 | Art Foundations | Graphic Design | Digital Film Making |
| :---: | :---: | :---: | :---: |
| Advanced Photography | Studio Art | Advanced Graphic Design 1 | Advanced Digital Film Making 1 |
|  | Advanced Studio Art 1 \& 2 | Advanced Graphic Design 2 \& 3 | Advanced Digital Film Making 2 \& 3 |
| IB Visual Art SL/HL (two year course) | IB Film SL/HL (two year course) | AP 2D Design |  |

## Legend



## VISUAL ARTS INTRODUCTION

At SAS the Visual Arts encompasses four distinct areas of creativity, fine arts, graphic design, photography and film making. The courses are designed for students to develop art-making, design, film and photo skills and expand their knowledge of visual media. Students can explore a wide variety of techniques and processes across 2D and 3D media. In class various styles and approaches to art, design, photography and film making are explored. The students create and reflect on their own work and that of others. Visual Arts courses develop in students the lifelong skills of problem solving, creative thinking, and self-expression.

## Art Foundations

## Course Code: 6001

Duration: Year
Prerequisites: Open to grade 9 to 12 students
Credits: 1.0
Art foundations provides students with opportunities to build skills across a wide range of media including drawing, painting, printing and sculpture. It is project-based and projects include lino printing, Surrealist painting, clay heads and an opportunity in the second semester to pursue a personal passion project. It is an entry level Visual Arts course.

## Studio Art

Course Code: 6014
Duration: Year
Prerequisites: Open to grade 10 to 12 students, one full year of visual art. Credits: 1.0
Studio Art offers an in-depth exploration of techniques and media with an emphasis on skill development in order to expand a students' visual arts foundation. Both 2-D and 3-D techniques including drawing, painting, ceramics, and sculpture are used to challenge students to become more thoughtful and skilled artists. Students use visual journals to thoroughly explore visual ideas, to research the context of art-making both historical and contemporary, and for personal reflection. Art Foundations is recommended but not required to take this course.

## Advanced Studio Art 1 and 2

Course Code: 6007, 6008
Duration: Year
Prerequisites: One full year of visual art, art foundations or studio art is recommended.
Credits: 1.0
Advanced Studio Art 1 is an upper level studio art course emphasizing self-direction in choice of subject matter and medium. Students create imaginative and expressive artworks of high technical and aesthetic standard. Students use visual journals to thoroughly explore visual ideas, to research the context of art-making both historical and contemporary, and for personal reflection. Students can continue to build on their portfolio of work in Advanced Studio Art 2 culminating in a final exhibition.

## Photography 1

Course Code: 6035
Duration: Year
Prerequisites: Open to grade 9 to 12 students
Credits: 1.0
Students learn multiple techniques with digital and 35 mm cameras, dark room techniques, and digital editing skills using the photo as the base image. Studio work includes functional as well as conceptual projects, with the camera, dark room, and software as tools to encourage creative and critical thinking skills.

## Advanced Photography

Course Code: 6012
Duration: Year
Prerequisites: Photography I and open to grades 11 and 12 students.
Credits: 1.0
Advanced Photography is offered for those who have a serious interest in photography following their experience in Photography 1. Students must show a high level of motivation, independent thinking, creative design, and problem solving skills. Students will develop both digital and print portfolios.


## AP 2D Design

Course Code: 6202
Duration: Year
Prerequisites: Open to grade 11 and 12 students, one full year of visual art. Credits: 1.0
Formerly AP Photo. Students create and submit an AP Portfolio to the College Board at the end of April in place of a written exam for this course. The portfolio addresses two-dimensional (2-D) design issues. One important component of the portfolio creation is a summer assignment to be completed prior to beginning the course in the new school year. For the portfolio, students are asked to demonstrate mastery of 2-D design skills using a variety of mediums. Please note that 3D art, including video is not explored in this class. 2D Design involves purposeful decision making about how to use the elements and principles of art in an integrative way. They help guide artists in making decisions about how to organize an image. Effective design is the benchmark standard whether one uses representational or abstract approaches to art. In addition to the portfolio, students also use classroom prompts and sketchbooks to explore visual ideas and reflect on personal projects.

## IB Visual Arts SL/HL Y1 and Y2

Course Code: SL Y1 6110/HL Y1 6130

## SL Y2 6120/HL Y2 6140

Duration: 2 Years
Prerequisites: Art Foundation and Studio Art are recommended Credits: 2.0
This course is intended for students with a serious interest in the visual arts and a high level of commitment to both studio work and deep research. There is a strong emphasis on self-direction in choice of subject matter and media. Students create imaginative and expressively powerful artwork of a high technical and aesthetic standard. Artwork is supported through a visual journal, a verbal and visual record of research on art topics demonstrating critical, technical, and aesthetic understanding.

This course of study ends with the completion of a comparative study of artists, a process portfolio based on visual journal research 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 in their visual journals. Comparative Study: SL students will submit 10-15 screens which examine and compare at least three artworks from at least two artists.

Final Exhibition: SL students will exhibit 4-7 final pieces supported by a curatioral rationale.

## Higher Level Coursework:

Process Portfolio: HL students submit 13-25 screens which document their creative process in their visual journals.
Comparative Study: HL students submit 10-15 screens which examine and compare at least three artworks from at least two artists. 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 supported by a curatorial rationale.

## Digital Film Making

Course Code: 8001
Duration: Year
Prerequisites: Open to grade 9 to 12 students
Credits: 1.0
The Digital Film Making course is in practical group film making. Students will develop technical skills and an understanding of film language through hands-on video making with a range of equipment. Conventions of genre, key film movements and styles will be explored, including those from our host country China. Each semester students also complete an analysis of a short scene from a film of their choosing. They can submit this in written form with screen grabs, as a slide presentation or a short video with voiceover.

This course is all about enhancing creativity, deepening students understanding of cinematic language and developing their own original short films through effective collaboration. Students will learn how film makers use cinematic language to communicate and create interesting and expressive movies. Through a variety projects, they will strengthen their conceptual thinking, creativity, problem-solving and team work.

Students enrolled in the course are required to submit a film as an entry to the annual Shanghai Student Film Festival as well as attending the two-day (Friday/Saturday) event in spring.

## Advanced Digital Film Making 1, 2 \& 3

Course Code: HS8005, HS8005B, HS8005C
Duration: Year
Prerequisites: Digital Film Making, Advanced 1, Advanced 2 Credits: 1.0
These courses build on the skills developed in the Digital Film Making class. Students continue their creative film making journey through collaboration. They explore cinematic language in greater depth and continue to hone their film making skills through practice. Through a variety of projects, they will deepen their conceptual thinking, creativity, problem-solving, teamwork and storytelling abilities. Students enrolled in the course are required to submit a film as an entry to the annual Shanghai Student Film Festival as well as attending the two-day (Friday/Saturday) event in spring.

## IB Film SL/HL Y1-Y2

Course Code: SL Y1 8165/Y2 8175; HL Y1 8185/Y2 8195
Duration: 2 Year
Prerequisites: None, open to all grade 11 students.
Credits: 2.0
The IB Film course is designed to provide students with a grounding in Film theory, history and practical film making. All students complete three components. The Textual Analysis, a 1,750-word essay analyzing a five-minute section of a prescribed film. The Comparative Study, a ten-minute video presentation on two films from contrasting cultures chosen by the students. The Film Portfolio, a sample of the student's best film making across a variety of projects and in three production roles (writer, director, editor, cinematographer or sound). In addition, Higher Level students submit a Collaborative Film Project, this is an additional seven-minute film and supporting essay. Students considering taking this course should know that it involves a significant commitment to completing work outside of class time and they can expect to spend one and a half to two hours a week on homework.

## Graphic Design

Course Code: 8010
Duration: Year
Prerequisites: Open to grade 9 to 12 students
Credits: 1.0
In this class students explore visual communication as it applies to the commercial art of Graphic Design. They learn about the principles of design, how these can be manipulated to improve design work, how designs differ depending on their intended target audience and about the various career paths in Graphic Design. They will learn how to work in both raster and vector graphics through projects such as book illustration, menu, logo, signage, packaging and poster design. We will explore design processes including visual research, thumbnailing ideas, creating mock-ups, through to realizing completed designs. This course leans heavily towards working digitally, with some sketchbook work in traditional media.

## Advanced Graphic Design 1, 2 \& 3

Course Code: HS8010A, HS8010B, HS8010C
Duration: Year
Prerequisites: Graphic Design, Advanced 1, Advanced 2
Credits: 1.0
These course build on the skills developed in the prior Graphic Design classes. Students explore the specific disciplines of the field in greater depth and in more detail. Through projects of increasing complexity and depth. Advanced Graphic Design students identify target audiences and design specifically for them, they research thoroughly and articulate clear design rationales.
They present multiple design solutions and learn how to pitch ideas to clients.

They will continue to deepen their working knowledge of raster and vector design work and continue to work through design processes including visual research, thumbnailing ideas, creating mock-ups, pitching and presenting design proposals, through to realizing completed designs.

These courses lean heavily towards working digitally, with some sketchbook work in traditional media.


Photo by Angie L. '25

## PERFORMING ARTS COURSES

## Performing Arts Department Flow Chart

Grade 9 students may choose any of the courses below based on meeting prerequisites:

| Concert Band: Beginning (grade 9 only) | Advanced Choir * (grade 9-12) | Orchestra: Prelude | Dance 1/Dance 2 | Theatre 1/ Theatre 2 |
| :---: | :---: | :---: | :---: | :---: |
| Concert Band: Intermediate* |  | Orchestra: Intermezzo* |  | Theatre Design (grade 9-12) |
| Concert Band: Advanced* |  | Orchestra: Finale* |  |  |
| Contemporary Music |  | Orchestra: <br> Advanced* |  |  |
| Grade 10 students may choose any of the courses below based on meeting prerequisites: |  |  |  |  |
| Concert Band: Intermediate* | Advanced Choir* (grade 9-12) | Orchestra: Prelude | Dance 1/Dance 2 | Theatre 1/ Theatre 2 |
| Concert Band: Advanced* |  | Orchestra: Intermezzo* |  | Theatre Design (grade 9-12) |
| Contemporary Music |  | Orchestra: Finale* |  | Advanced Theatre Design (grade 11-12) |
|  |  | Orchestra: <br> Advanced* |  |  |

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



## PERFORMING ARTS INTRODUCTION

The Performing Arts Program is a cornerstone of the SAS curriculum, which seeks to balance academics with educating the "whole person." The constant aspiration of the Performing Arts Program at SAS is to create an exhilarating environment that nurtures every student's sensitivity, understanding, and enjoyment of the arts. Performing Arts course options include Dance, Drama/Theatre, Music.

It is always encouraged that students continue with the Performing Arts in order to develop their performance skills, to gain a deeper understanding of different styles and genres, for continued confidence in an expressive area of knowledge, and/or to consider or prepare for career choice options. A sustained effort in the arts along with a strong academic effort often attracts the attention of college admissions officers.

## Dance

Dance is a unique way of perceiving and communicating. Dance involves exploration, concentration, focus, and the ability to work and create with other dancers. Students develop a strong, flexible, and graceful body by exploring a variety of dance styles.

Dance is a course designed for any male or female who would like to use the assets of dance to improve physical fitness, to increase talents in athletics, and to develop the ability to dance either for fun or as a performer. This course combines dance exercises, dance technique, and dance choreography. The class is designed to improve posture, strength, flexibility, endurance, agility, balance, and choreographic and improvisational techniques. Students will experience various types of dance including ballet, modern, jazz, hip-hop, Broadway, and some elements of tap, social, and folk dance, and will incorporate what they have learned into creative dance choreography.

Students will also learn to evaluate dance and make aesthetic decisions in regards to creativity. Students will apply appropriate injury prevention techniques and will learn aspects of dance history as well. Students will perform for each other in class and in the semester show. Students can take this class as a Performing Arts elective (grades 9-12) or as a Physical Education elective (grades 11-12).

## Drama and Theatre

Drama and Theatre courses aim to help students understand the nature of performance through theatre; to understand it by making it as well as by studying it; to understand it not only with their minds but with their senses, their bodies, and their emotions; to understand the forms it takes in cultures other than their own; and through this understanding to better understand themselves, their society, and their world. The overarching goals of these courses is to develop an understanding of the arts of drama and theatre, their application to daily life, and the enjoyment of theatre as an art form.

IB Theatre is a combination of performance, production, analysis and study of western and non-western, ancient and modern theatre. The aim of the IB Theatre course is to help students' understanding of the nature of theatre; to understand it by making it as well as by studying it; to understand it not only with their minds but with their senses, their bodies and their emotions; to understand the various forms it takes in cultures other than their own; and through this understanding endeavor to better understand themselves, their society, and their world.

Students in all Theatre classes are expected to see live theatre as part of their course, and as such excursions to see performances in Shanghai will be arranged. Artists in Residence are often also invited in to help students get expertise in specialist areas. Students may also audition for the regional APAC Theatre festival and are invited each year to participate in an international theatre festival with ISTA (International Schools Theatre Association).

## Music

The PDHS Music Program includes classes in Band, Choir, and Orchestra. In all music classes, students connect and perform music together in both small ensembles and full ensembles. Students have the opportunity to create their own music compositions through music notation software. Students also respond to music through a variety of written assessments.

Through an audition process, the music teachers will assist students in determining an appropriate level of ensemble. There is one Choir class, two Band classes, and five Orchestra classes. Students with more experience will be placed in the Advanced Band or Orchestra while the other classes are for students with less experience.

The Bands, Choir, and Orchestras perform at least two major concerts per year. Students may also audition for participation in the regional (APAC) and/or international (AMIS) music festivals. Other opportunities available to students in these classes include participating in the AMIS Online Solo \& Ensemble Festival or the AMIS Young Composer's Competition.

Students may take up to four years of Band, Choir, or Orchestra and receive credit for all four years.

## Contemporary Music

Course Code: HS1404
Duration: Year
Prerequisites: None. Some musical background is recommended (piano, guitar, string/band instrument, music tech experience, trad. Chinese instruments)

## Credits: 1.0

The Contemporary course Pudong High School students offers students a comprehensive exploration of music history, theory, and practical applications with a specific focus on music production and technology. Through a combination of theoretical learning and handson practical experience, students will explore the fundamental concepts, tools, and techniques used in the modern music industry.

This course aims to develop students' creative and technical skills in music production, recording, editing, and sound design. Students will gain a deep understanding of the role of technology in music creation and how it has revolutionized the way we compose, record, and share music.

By the end of the Contemporary Music course, students will have developed a solid foundation in music performing and creating in contemporary settings as well as production and music technology, enabling them to pursue further studies in the field or embark on creative projects independently. This course fosters critical thinking, creativity, collaboration, and technical proficiency, preparing students for the challenges and opportunities in the rapidly evolving music industry. This class is also a great pathway towards the IBDP Music course.

## Advanced Choir

Course Code: 6041
Duration: Year
Prerequisites: Current teacher recommendation and/or audition Credits: 1.0
Advanced Choir is a group open to students with previous Voice and/or Choir experience. Through Advanced Choir, students will excel at performing, creating, and responding to a variety of music genres. The course will increase their knowledge of and fluency with musical terminology, history, and style.

Students in Advanced Choir should be able to sight-sing fluently, improvise, and be able to learn and perform advanced choral literature. They must be able to sing independently by hearing a harmony and carrying their own line. Students are accessed through the National Common Core Arts Standards, and public performance is a required component of the course.

The Advanced Choir class is likely to perform SAB and SATB pieces with divisi, however, the repertoire level will be determined each year based on the number of students and skill level.
Regional and International Music Festivals are offered to students in Advanced Choir.

## Concert Band: Beginning

Course Code: 6039
Duration: Year
Prerequisites: Grade 9 students only, no prerequisites
Credits: 1.0
The Beginning Band course is year-long and will provide students with the opportunity to play band instruments including Woodwind, Brass, or Percussion instruments. Basic playing techniques are introduced through a variety of etudes and band repertoire. Students will learn basic music theory and music vocabulary such as reading and understanding musical notation and symbols. Students will acquire skills, abilities, understandings, and attitudes necessary to express themselves musically as individuals and as members of an ensemble. Each student will be given the opportunity to rent an instrument from the school or buy one from a local vendor with teacher advice.

## Concert Band: Intermediate

Course Code: 6042
Duration: Year
Prerequisites: One year of experience or teacher recommendation Credits: 1.0
Intermediate Band 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 performance. Students are accessed through the National Common Core Arts Standards and public performance is a requirement of the course.

Students in this group will focus on playing their instruments with a characteristic tone and good intonation. They will be able to read music effectively and play their own part accurately in each piece rehearsed. Students will also demonstrate a knowledge of the history and styles of the music being played.

The Intermediate Band class is likely to perform repertoire that is in the range of Level 2-3.5, however, the level will be determined each year based on the instrumentation and skill level of the students. Regional and International Music Field Trips are offered to students in Intermediate Band.

## Concert Band: Advanced

Course Code: 6043
Duration: Year
Prerequisites: Current teacher recommendation and/or audition Credits: 1.0
Advanced Band is open to very experienced Woodwind, Brass and Percussion players. The course builds upon experiences gained in Concert Band: Intermediate (Course Code 6022). Students may move directly into Advanced Band from Grade 8 if they audition successfully. Students in Advanced Band are expected to be strong sight-readers and musicians. They should already have strong foundational skills, including playing their instrument with good intonation, good intonation, and have a strong understanding of articulation, dynamics, and expression.

Specific instrumental technique, ensemble skills, theoretical literacy, and historical awareness will be developed through performance. Students are accessed through the National Common Core Arts Standards and public performance is a requirement of the course.

The Advanced Band class is likely to perform repertoire that it is a Level 3.5 and above, however, the level will be determined each year based on the instrumentation and skill level of the students. Regional and International Music Field Trips are offered to students in Advanced Band.

## Orchestra: Prelude

Course Code: 6054
Duration: Year
Prerequisites: None
Credits: 1.0
Prelude Orchestra (beginning level orchestra) is a year-long course that allows students to explore their interest in music by learning a traditional string orchestra instrument. Students will be asked to choose an instrument as a vehicle for learning performance in music and will begin at a foundational level. Students will develop their skills throughout the year through guided instruction and feedback from the instructor. Students will also have opportunities to perform on stage and in ensembles throughout the year. Focus will be given to positive performance and practice habits as well as comprehensive musicianship.

## Orchestra: Intermezzo

Course Code: 6056
Duration: Year
Prerequisites: One year of experience or teacher recommendation Credits: 1.0
Intermezzo is open to violin, viola, cello and double bass players with at least one year of experience. Specific instrumental technique, 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 based on the US National Standards in Music. This ensemble will build on previous orchestral experience, solo and ensemble performances, and music composition. Regional and international music field trips are offered and public performance is a required component of the course.

## Orchestra: Finale

Course Code: 6055
Duration: Year
Prerequisites: Three years of experience or teacher recommendation Credits: 1.0
Finale is open to violin, viola, cello, and double bass players with at least three years of experience. Specific instrumental technique, 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 based on the US National Standards in Music. This ensemble will build on previous orchestral experience, solo and ensemble performances, and music composition. Regional and international music field trips are offered and public performance is a required component of the course.

## Orchestra: Advanced

Course Code: 6045
Duration: Year
Prerequisites: Audition
Credits: 1.0
Advanced is open to all experienced violin, viola, cello, and double bass players. Specific instrumental technique, 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 based on the US National Standards in Music. This ensemble will build on previous orchestra experience, solo and ensemble performances and music composition. Regional and international music field trips are offered and public performance is a required component of the course.

## IB Music: SL \& HL Y1

Course Code: SL Y1 6222; HL Y1 6131; SL Y2 6121; HL Y2 6141
Duration: 2 Years
Prerequisites: Current teacher recommendation and/or audition Credits: 2.0
IB Music is a dynamic, integrated course where students develop their identity and potential as musicians. The study of IB music encourages inquiry into creative practice and performance processes. This course is designed to guide students towards developing listening, creative and analytical skills as well as encouraging cultural understanding and international mindedness. Students at both SL and HL embrace the roles of researcher, creator and performer across the processes of exploring, experimenting and presenting music. HL students will be extended to engage in real life music making practices, collaboration and designing an original project that will be documented in a multi-media presentation. Activities within the course will center around learning experiences that invite students to engage with music from their personal context, the local context of the community in Shanghai as well as unknown global contexts. Content covered will be wide-ranging and come from a range of Areas of Inquiry which provides a framework for diversity of engagement. All students in the DP music course will engage with music technology. This aspect of the course is new and intended to help develop well-rounded musicians that can thrive in contemporary music making environments. Music technology may be used as a creative tool, a performance tool or both.

Who is this course for? It is by design inclusive and student centered; classically trained ensemble musicians, vocalists, singer-songwriters, electronic musicians, students who play traditional Chinese instruments will all find a pathway through this course.

Assessment at both SL and HL will encompass a range of research, composition and performance tasks that will be extracted from journal work, technical performance and composition studies as well as live performances.

## Theatre Design/Advanced Theatre Design

Course Code: 6059, 6060
Duration: Year
Prerequisites: None
Credits: 1.0
This course is designed to accommodate those students who would prefer to work on the technical side of performance. The course will focus on developing conceptual design skills following the process of research, exploration, execution of designs and reflection/evaluation at the end of the project. Work is a mixture of individual and group projects. Students will focus on Set, Costume, Sound, Lighting, Prop and Makeup Designs as well as learn how to program computer software systems like QLAB to run a show. As students progress through the course, the work becomes increasingly practical and projects result in real world products as they design, find, order or make the costumes, props, makeup and publicity for the Musicals and performances across all divisions of SAS. The curriculum will follow a spiral pattern to accommodate students taking the course more than once.

## Theatre 1

Course Code: 6057
Duration: Year
Prerequisites: None
Credits: 1.0
This course starts with students getting to know each other through games and ensemble activities to build group rapport. Students will then explore a modern theorist and apply their acting techniques to an original piece of devised theatre for an SAS Pudong audience. Improvisation will also be explored and is a key skill not just for acting but for any student who is interested in developing their creativity and ability to think on their feet - an essential skill in the modern world. Finally, students will learn how to direct, design and perform a scripted play. Public performances will occur during class and flexi times and work will also be recorded and shared with families. Assessment will take into account students' contributions in class and during the rehearsal process, their acting or technical skill in final performances, and through a variety of reflection activities which might include podcasts, video diaries and written work.


## Theatre 2

Course Code: 6058
Duration: Year
Prerequisites: Theatre 1
Credits: 1.0
The study of theatre arts provides students with an opportunity to take on roles, to create and enter into imagined worlds. Creating, presenting, and analyzing drama is a collective experience. By communicating in both real and imaginary situations, students develop proficiency in listening, speaking, writing, questioning, and negotiating. Through the process of "stepping into the shoes of another," students develop and express empathy. Through analysis of theatre productions, they become aware of universal aspects of human experience. This course requires students to create and to perform theatrical presentations. Students will analyze, interpret, and perform works of drama from various cultures, including early western plays. Student will complete a variety of workshops in characterization, monologue, voice, scene work, and one-act play production. The functions of playwright, director, actor, producer, designer, technician, and audience will be analyzed. This course sets the foundation in drama work as it relates to the art of theatre. Students are expected to write in their response journal reflecting on their artistic growth and understanding of themselves, ensemble work, and the art of theatre. They are continually assessed on their individual contributions towards the ensemble and are required to participate in the planning and implementation of each assignment.

## Dance 1-2

Course Code: 7010, 7011
Duration: Year
Prerequisites: None
Credits: 1 credit each Performing Arts elective
Dance is a course designed for any male or female who would like to use the assets of dance to improve physical fitness, to increase talents in athletics, and to develop the ability to dance either for fun or as a performer. This course combines dance exercises, dance technique, and dance choreography. The class is designed to improve posture, strength, flexibility, endurance, agility, balance, and choreographic and improvisational techniques. Students will experience various types of dance including ballet, modern, jazz, hip-hop, Broadway, and some elements of tap, social, and folk dance and they will incorporate what they have learned into creative dance choreography. Students will also learn to evaluate dance and make aesthetic decisions in regards to creativity. Students will apply appropriate injury prevention techniques and will learn aspects of dance history as well. Students will perform for each other in class and have the option to perform at the semester show. Students can take this class as a Performing Arts elective (grades 9-12) or as a Physical Education elective (grades 11-12).

## IB Dance: SL \& HL Y1-Y2

Course Code: SL Y1 7013/Y2 7033; HL Y1 7023/Y2 7043
Duration: 2 Years
Credits: 2.0
The IB Dance curriculum aims for a holistic approach to dance, and embraces a variety of dance traditions and dance cultures: past, present, and looking towards the future. Performance, creative, and analytical skills are mutually developed and valued whether the students are writing papers or creating and performing dances. The curriculum provides students with a liberal arts orientation to dance. This orientation facilitates the development of students who may become choreographers, dance scholars, performers or those, more broadly, who seek life enrichment through dance.

While prior dance is not mandatory at SL, it is recommended. At HL it is very strongly recommended.

The curriculum is designed to challenge students. It draws on a wide range of dance cultures that reflect varied histories, practices, and aesthetics. Nonetheless, doing so establishes the important idea or belief that there are common parameters in dance across different cultural contexts. Whether performed for their communities, with their communities, or for their personal pleasure, dances have-and serve-a conscious intention, and involve space, time and energy.

Assessment in both SL and HL includes the following:

- Dance works composed by the student
- Written reflections (1200 words)
- Investigation across cultures
- A dance performance, which may include a solo or a duet

All students enrolled in an IB subject must sit the exam at the end of year 2.

## IB Theatre SL/HL Y1-Y2

Course Codes: SL Y1 6112/HL Y1 6132/ SL Y2 6122/ HL Y2 6142
Duration: 2 Years
Prerequisites: Recommended Theatre 1 or Theatre 2 Credits: 2.0
IB Theatre is a way for students to celebrate the international and intercultural dynamic that inspires many diverse forms of theatre. At the core, for both SL and HL, lies a concern with clarity of understanding, critical thinking, reflective analysis, effective involvement, and imaginative synthesis—all achieved through practical engagement in theatrical activities. As "theatre makers," students explore theatre in the making, theatre in performance, and theatre in the world. The activities include independent research, application, and reflection, all developed through the concept of ensemble. The theatre course emphasizes the importance of working individually and as a member of an ensemble. They explore different theatre traditions in their historical contexts and develop academic skills appropriate for the study and understanding of theatre. They develop the confidence to explore, to experiment and to present work individually and collaboratively on innovative projects. This involves challenging established notions and conventions of theatre. Theatre students at both SL and HL are presented with a common core syllabus that encourages the development of certain skills, attributes, and attitudes. Due to the nature of the theatre course, there may be no great difference in the complexity or artistic merit of the work produced by students at SL and HL. However, the difference in recommended teaching times at SL and HL signals a clear distinction between the demands made on students. It is expected that students at HL use the extra time available to develop their personal research and practice in theatre, and to extend their understanding of the ideas, practitioners, and concepts encountered during the course. Theatre is a project based subject and does not have any final exams. Assessment is based on $100 \%$ coursework which is both practical and theoretical, and takes the forms of written research, analysis and reflection supported by uploaded videos of performances and presentations.

## PHYSICAL AND HEALTH EDUCATION COURSES

Physical and Health Education Department Flow Chart


## INTRODUCTION:

Physical \& Health Education at Shanghai American School is a health and fitness-based program that aims to instill in students a desire to pursue lifelong wellness.

The goal is to promote healthy active living, enjoyment of regular physical activity, and student development of:

- An understanding of the importance of physical fitness, health, and well-being and the factors that contribute to them
- A personal commitment to daily physical activity and positive health behaviors
- The skills and knowledge students require participating in physical activities throughout their lives

The PE $1 \& 2$ courses are integrated with $15 \%$ health and $85 \%$ physical education and are required courses for graduation. PHE 3, Lifeguarding, Water Safety Instructor and Sport League advanced elective course are offered to students who are interested in a more in-depth study of sport and exercise.

## Physical \& Health Education 1 (PHE1)

Course Code: 7000
Duration: Year
Prerequisites: None
Credits: 1.0
The PHE 1 course emphasizes the vital importance of health and fitness to maintaining lifelong wellness. Students develop motor skills and knowledge of related biomechanical principles and strategies while practicing sportsmanship and cooperation. Physical Education units include a variety of team and individual activities, including Health Club, volleyball, soccer, basketball, badminton, floor hockey, touch rugby, swimming, and low organized games. In practical classes students are assessed on standards. The health component of the course is designed to educate students to make positive and intelligent decisions that will enhance their quality of their life. Topics of study may include drugs \& alcohol, sexual education, and current events.

## Physical \& Health Education 2 (PHE2)

Course Code: 700
Duration: Year
Prerequisites: PHE 1 or equivalent
Credits: 1.0
The PHE 2 course places special emphasis on encouraging students to take ownership of their own health and wellness. Building on concepts and skills from PHE I, this course aims to reinforce and further promote active and healthy living. Units of activity include a variety of team and individual activities, including Health Club, volleyball, soccer, basketball, badminton, touch rugby, floor hockey, swimming, and low organized games. In practical classes, as in PHE I, students are assessed on our standards. In Health, topics of study may include social and emotional learning, fitness, and making personal healthy decisions.

## Physical \& Health Education 3: Personal Fitness

Course Code: 7004
Duration: Year
Prerequisites: Physical \& Health Education I \& II or equivalent Credits: 1.0
This course is designed for students who have completed the PHE graduation requirement and would like to continue to develop their knowledge, skills, and physical fitness at an advanced level. The course comprises total fitness units where students will train together as a class. After a base level of fitness is achieved students will begin to implement their own personal fitness. Goal setting, fitness planning, and journaling are very important components for this course. Students will design and implement a detailed personal fitness program. Students will explore the current topics in weight training and personal fitness and how to apply these to their own personal fitness programs. Health topics include fitness, exercise physiology, anatomy, nutrition, and possibly athletic injuries. Other key components to the course include keeping fitness journals, developing leadership skills, and utilizing technology in sport and fitness.

PE 3 - Water Safety Instructor (WSI)
Course Code: 7006
Duration: Semester
Prerequisites: Must be at least sixteen years old by the end of the class, and pass the basic swimming test
Credits: 0.5
WSI is an American Red Cross curriculum that will result in a WSI certification. The students are taught how to be swim instructors and will be trained to teach courses and presentations in swimming, and water safety programs including:

- Parent and Child Aquatics
- Preschool Aquatics
- Learn-to-Swim
- Adult Swim
- Private Lessons
- Safety Training for Swim Coaches
- Water Safety Presentations


## PE 3 - Lifeguarding

Course Code: 7007
Duration: Semester
Prerequisites: Must be fifteen years old by the completion of the course and pass a basic swimming test
Credits: 0.5
Lifeguarding is an American Red Cross curriculum that certifies the students upon completion in lifeguarding, advanced first aid, and CPR/ AED. The students learn to act with speed and confidence in first aid, emergency situations in and out of the water, and breathing and cardiac emergencies. The program also trains students in the management skills to work in an aquatics environment.


# Lack of activity destroys the good condition of every human being, while movement and methodical physical exercise 

## save it and preserve it.

Plato

## ELECTIVES

## IB Theory of Knowledge Y1/Y2

Course Code:8101 (Y1), 8102 (Y2)
Duration: Semester $2(\mathrm{Y} 1)$, Semester $1(\mathrm{Y} 2)$
Grade: 11/12
Credits: 0.5 each
Theory of Knowledge is an elective course studying knowledge itself and investigating such questions as "How do you know what you know?"; "Can knowledge lead to truth?"; and "How do we integrate knowledge across personalities and cultures?" Students have the opportunity to step back from the relentless acquisition of new knowledge in order to consider the role of knowledge in their own lives and in world culture. Many students find it thought provoking and influential in developing their life goals and world view. In this class seminars and discussions are common, as are presentations, papers, journals, and group projects. Attendance and participation are key. TOK Y1 is taught in the second semester of grade 11 and TOK Y2, which is the required continuation of the Y1 course, is taught in first semester of the grade 12. IB assessments of one essay and one oral presentation are required in Y2.

## AP Computer Science A

Course Code: 8201
Duration: Year
Prerequisites: Teacher recommendation, strong foundation of mathematical reasoning, no prior computing experience necessary
Credits: 1.0
AP Computer Science A is equivalent to a first-semester, college level course in computer science. The course is built around learning and strengthening skills on the design and implementation of computer programs that correctly solve a given problem. These programs should be understandable, adaptable, and reusable. This course includes other related important aspects, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. In addition, the responsible use of these systems is an integral part of the course. The course emphasizes heavily on both objectoriented and imperative problem solving and design using the AP board chosen programming language, Java with the end goal of developing high level of logical computing skills that serves as a stepping stone for learning other current languages in the Information Technology age.

All students enrolled in an AP subject must sit the external exam at the end of the school year.

## AP Computer Science Principles

Course Code: 8204
Duration: Year
Prerequisites: Teacher recommendation, strong foundation of mathematical reasoning, no prior computing experience necessary
Credits: 1.0
AP Computer Science Principles course is complementary to AP Computer Science A. Students can take these courses in any order or at the same time, as schedule permit. This course introduces students to the central ideas of computer science, inviting students to develop their computational thinking vital for success across multiple disciplines.

The course is unique in its focus on fostering students to be creative and encouraging to apply creative processes when developing computational artifacts. Students 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. The course focuses beyond the study of machines and systems and have the opportunity to investigate the innovations in other fields that computing has made possible and examine the ethical implications of new computing technologies.

Students design and implement innovative solutions using an iterative process as a scientist would similar to what artists, writers, and engineers use to bring ideas to life which serves as their performance tasks submitted externally to the AP in addition to sitting an external exam required at the end of the year.

## AP Capstone Seminar

## (Year 1 of Capstone Diploma or Certificate)

Course Code: 8202
Duration: Year
Credits: 1.0
This 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 must sit the AP Seminar exam at the end of the year.

## AP Capstone Research

## (Year 2 of Capstone Diploma or Certificate)

Course Code: 8203
Duration: Year
Prerequisites: Must have taken AP Seminar and scored a 3 or higher. Credits: 1.0
AP Research is the second course in the AP Capstone two-year program. Within AP Research students will design and execute an investigation on an original topic using a chosen inquiry method, which will culminate in an academic paper and a presentation with an oral defense. This year-long course will allow students to employ the skills they mastered in the AP Capstone Seminar Course the year before. The focus of the course this year will be on research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information.

## IB Computer Science SL/HL Y1-Y2

Course Code: SL Y1 8115, HL Y1 8135
Duration: 2 Years
Prerequisites: None
Credits: 2.0
The Diploma Programme computer science course is engaging, accessible, inspiring and rigorous. During the course the student 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; think procedurally, logically, concurrently, abstractly, recursively and think ahead; utilize an experimental and inquiry-based approach to problem-solving; develop algorithms; and appreciate how theoretical and practical limitations affect the extent to which problems can be solved computationally. Note that, for full IB Diploma students, Computer Science counts toward Science credits.

## Electrical and Mechanical Design

Course Code: 6066
Duration: Year
Prerequisites: None
Credits: 1.0
In this course, students will use the design cycle to create innovative solutions for real world scenarios. Over the course of the year, students will develop and apply coding skills, engage with Computer Aided Design, use microcontrollers, 3D printers, laser cutters, while working with resistant materials.

Using skills learned in class students will develop highly evolved prototypes, demonstrating their mastery of both practical skills and conceptual design.

Electrical and Mechanical Design is a course open to all students, regardless of prior experience, interests, or skills and can be taken Grades 9-12.

## Engineering and Robotics

Course Code: 6067
Duration: Year
Prerequisites: None
Credits: 1.0
Students will explore engineering and robotics through the design cycle with an emphasis on innovative problem solving to deal with real world scenarios. This course is designed to expose students to engineering concepts as well as learning to design, build and program robotic and automated systems using the VEX V5 robotics platform.

With additional access to microcontrollers, 3D printers, laser engravers, CNC machines and mechanical tools, students will have the opportunity to develop highly evolved prototypes, demonstrating their mastery of both practical skills and conceptual design.

Engineering and Robotics is a course open to all students, regardless of prior experience, interests, or skills and can be taken Grades 9-12.

## Internship 1-4

Course Code: 8030, 8031, 8032, 8033
Prerequisites: Must be registered with the school under the
Internship Program
Credits: 0.5-1.0
Shanghai American School offers high school credit for incoming 11th or 12th graders who are registered with the in-ternship programs. 0.5 credit is granted for 60-119 hours; 1.0 credit is granted for 120+ hours. All participating students must have a site supervisor, maintain a daily journal and write a final report reflecting on their experience. SAS is not responsible for securing internships for students. For further information, please contact your counselor.


## POLICIES REGARDING COURSES

Please review the information below. Teachers and counselors provide guidance and support to students throughout this process. We encourage students to ask questions, seek advice, and engage in dialogue with us as they consider their options.

## Course Catalog

The Course Catalog is available for download from http://www.saschina.org/en/academics/high-school. The catalog includes descriptions, course codes, and prerequisites. Every department's courses are also represented by a flowchart that provides a snapshot of how each department's courses are sequenced. Students need to reference the course catalog in order to complete their course selection form. Some courses listed in the course catalog may not be offered if there is limited or no student interest. This may vary from year to year depending on student preference.

## Course Preference Form

Students will receive a paper copy of the course preference form at the course preference meetings in January. All students will meet with their counselor and speak with their teachers about their course preferences as well as request their signatures to indicate the strength of their recommendation.

## Signatures and Recommendations

After students receive their teachers' signatures, parents need to review their child's course preference form, discuss the choices with their child, and sign the form. Counselors are available to answer questions and meet with families to discuss options. The last stop a student makes is to the counselor. The counselor reviews and discusses the course preference form including the overall load or rigor, and the student's request to enroll in a course against a teacher's recommendation.

## Override

If students are considering a course they have not been recommended by a teacher or counselor to take, they must complete the "Course Override" Form. In addition, overrides will require a parent(s) appointment with the counselor, or in lieu of a face-to-face appointment a phone conversation, to ensure the parent(s) have full understanding of the override process. These appointments will take place prior to students inputting their preferences on PowerSchool.

## IB/AP Exam Fees

Please be aware that any appropriate IB/AP testing fees will be applied to student accounts in November at the same time as tuition for second semester. These fees are separate from and in addition to regular SAS tuition fees.

## Schedule Changes

Please read the school's policy regarding schedule changes (in the student handbook). This policy will be reviewed with students at the course preferences meetings by the student's counselors.

Scheduling is a process that takes months to complete and involves matching teaching staff to student demand for courses. Teaching schedules, classroom space, and student interest are only a few of the considerations when the high school master schedule is built. The driving force behind this process is the information students submit on their course preference forms. Teachers and counselors are available to advise students on finding the best fit and balance. The completed form should represent a student's thoughtful and informed choices.

Students must understand that limited movement is permitted in their schedules after they have submitted their course preference forms to their counselor. Students and parents may not request to have specific teachers or classes with friends. All course requests are final unless the placement is clearly inappropriate or there is a conflict with another course. In this case, counselors will contact students and advise them on other course options.

Requests to add, delete, or change a course must be made to the student's counselor before the end of the first ten days of the semester. Students must complete a Schedule Change Request form that can be picked up at the counselors' office. All efforts will be made to schedule students with their preferred courses, if however there is a conflict or a course is already filled, counselors will contact students and advise them of their other course options.

## If a students wants to make a schedule change:

1. Student completes the Schedule Change Request form.
2. Student completes the rationale section of the form (specifying educationally sound reasons) and schedules an appointment to see his/her counselor to review and discuss the request.

It is important to note that receiving approval for schedule changes after the first ten days of school becomes more difficult and carries different consequences as a result.

## Please note:

- *WP (Withdraw Passing) and *WF (Withdraw Failing) grades are not included in the calculations of GPA nor is credit granted.
- Only in exceptional cases (e.g., hospitalization, recommendation from the High School Support Team) and with approval from the high school principal is a student allowed to withdraw from a course beyond Quarter 1 with a WP or WF*.
- When a student transfers to a new class, the grade from the dropped class does not carry forward into the added class.



# 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。

## SHANGHAI AMERICAN SCHOOL

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[^1]:    * "Electives" will include AP Computer Science A and Principles, AP Capstone Seminar and Research, IB Theory of Knowledge, IB Computer Science, Design Technology and Internships.

[^2]:    * Please note that VHS policies are different from SAS policies in terms of deadlines, workload, parental involvement, teacher availability, vacations, etc... If a student engages in a VHS course, they are subject to all the policies and practices of that organization.

