CONTENTS

Schoolwide Transfer Goals ............................................................ 2
School Mission, Core Values, “Best Fit” Philosophy, and
Graduation Requirements ............................................................. 3
IB Program .................................................................................... 4
Advanced Placement and AP Capstone Program .......................... 6
Innovation Institute ........................................................................ 9
Master Course List ......................................................................... 10
English Courses ............................................................................ 13
Mathematics Courses ................................................................... 16
Social Studies Courses .................................................................. 20
Science Courses ........................................................................... 25
Global Languages Courses ........................................................... 29
Chinese Language Courses ............................................................ 33
Visual Arts Courses ....................................................................... 38
Performing Arts Courses .............................................................. 41
Applied Arts Courses ..................................................................... 44
Physical and Health Education Courses ........................................ 46
Electives ....................................................................................... 49
Learning Support .......................................................................... 52
English as an Additional Language (EAL), ................................. 52
Online Learning
(Pamoja Online IB Classes and VHS and GOA Classes) ............ 53

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.
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/s 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

CREATIVE LEARNERS — 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

ETHICAL GLOBAL CITIZENS — SAS students are ethical global citizens who take action based on informed decisions filtered through empathy, integrity, sustainability, and social justice. SAS students ...
- Acknowledge and respect perspectives and cultures with consideration and care
- Take action with honesty and sincerity
- Make decisions and take actions to impact sustainability significantly
- Engage in authentic opportunities to impact others positively

SCHOOLWIDE TRANSFER GOALS
- Engage in authentic opportunities to impact others positively
- Make decisions and take actions to impact sustainability significantly
- Acknowledge and respect perspectives and cultures with consideration and care and social justice. SAS students ...

“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.

SAS MISSION
Shanghai American School inspires in all students:
- A lifelong passion for learning
- A commitment to act with integrity and compassion
- The courage to live their dreams.

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

GRADUATION REQUIREMENTS
The School’s graduation requirements are designed to meet accreditation standards and entry requirements for a wide variety of colleges. To be eligible for high school graduation, a student must:
- Earn a minimum of 24 credits
- Attend eight semesters of high school in grades 9 to 12 (therefore no student may graduate early)
- Attend SAS for all of Grade 12

Subject area requirements for graduation include:
- English 4.0 credits
- Mathematics 3.0 credits
- Science 3.0 credits
- Social Studies 3.0 credits
- Fine, Performing or Applied 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

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 course 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.

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 course 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.
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.

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

IB Diploma Subject Requirements

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

Additional IB Diploma Requirements

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

Theoretical Knowledge (TOK)

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

Creativity, Activity, and Service (CAS)

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

Learner Profile

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

IB Course Offerings 2023-24

IB Diploma candidates choose:

• 3 HL courses and 3 SL courses
• 1 course from each of the 6 groups, plus Theory of Knowledge (TOK)

Group 1

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

Group 2

• Mandarin B HL/SL
• Economics HL/SL
• Mandarin ab initio SL
• History HL/SL
• Psychology HL/SL
• Environmental systems & societies SL+HL
• French ab initio SL
• Spanish B HL/SL
• Business and Management SL/HL
• Spanish ab initio SL
• Global Politics SL/HL

Group 3

• Economics HL/SL
• History HL/SL
• Environmental systems & societies SL+HL

Group 4

• Biology HL/SL
• Math: Analysis and Approaches SL and HL
• Chemistry HL/SL
• Physics HL/SL

Group 5

• Computer Science HL/SL
• Music SL/HL
• Theatre SL/HL
• Film SL/HL
• Dance SL/HL

Group 6

• Mandarin B HL/SL
• French BHL/SL
• Spanish B HL/SL
• Visual Arts SL/HL
• Film SL/HL
• Sports, Exercise & Health Science SL/HL

The Advanced Placement (AP) Program

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

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

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

AP Capstone

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

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

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

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

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

The AP Capstone Diploma or AP Capstone Certificate

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

Examination Information

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

AP University recognition link:
http://international.collegeboard.org/programs/ap-recognition

For more information, please visit collegeboard.org/apcapstone
AP Capstone Program Year One: AP Seminar

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

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

Teachers have the flexibility to choose appropriate themes that allow for deep exploration based on student interests, local and/or civic issues, global or international topics, and that allow for deep exploration based on student interests, and personal accounts; and explore artistic and literary works to gain a rich appreciation and understanding of issues.

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

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

AP Capstone Program Year Two: AP Research

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

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

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

AP Capstone Diploma

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

Innovation Institute

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

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

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

For more information about the Innovation Institute please contact Ms. Maia Dean | Maia.Dean@saschina.org.

Participation in the Innovation Institute requires a two-year commitment. Institute students in 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 10
- English 10
- Biology Lab Science
- Innovation & Design
- AP Seminar

For more information about the Innovation Institute please contact Ms. Maia Dean | Maia.Dean@saschina.org.
## Master Course List

### English

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Codes</th>
<th>Credits</th>
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<tr>
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<td>HS1001</td>
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<td>9</td>
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<tr>
<td>English 10</td>
<td>HS1002</td>
<td>1</td>
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<tr>
<td>English 11</td>
<td>HS1003</td>
<td>1</td>
<td>11</td>
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<tr>
<td>English 12</td>
<td>HS1004</td>
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### Integrated Math

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<tr>
<td>Integrated Math 1 (M1)</td>
<td>HS3201</td>
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<tr>
<td>Integrated Math 2 (M2)</td>
<td>HS3202</td>
<td>1</td>
<td>10,11</td>
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<tr>
<td>Integrated Math 3 (M3)</td>
<td>HS3203</td>
<td>1</td>
<td>10,11,12</td>
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<tr>
<td>Integrated Math 3 Plus (M3+)</td>
<td>HS3204</td>
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### AP Calculus AB

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<tbody>
<tr>
<td>AP Calculus BC</td>
<td>HS3201</td>
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By: Mandy Wang
### Visual Arts

<table>
<thead>
<tr>
<th>Course</th>
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<th>Grades</th>
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<tbody>
<tr>
<td>Art Lab</td>
<td>HS6064</td>
<td>1</td>
<td>9,10,11,12</td>
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<tr>
<td>Art Coded</td>
<td>HS6065</td>
<td>1</td>
<td>9,10,11,12</td>
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<tr>
<td>Innovation &amp; Design**</td>
<td>HS6051</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Intermediate Art Studio</td>
<td>HS6027</td>
<td>1</td>
<td>10,11,12</td>
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<tr>
<td>Advanced Art Studio</td>
<td>HS6028</td>
<td>1</td>
<td>11,12</td>
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<tr>
<td>IB Visual Art SL Y1-Y2</td>
<td>HS6110, HS6120</td>
<td>2</td>
<td>11,12</td>
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<tr>
<td>IB Visual Art HL Y1-Y2</td>
<td>HS6130, HS6140</td>
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<td>IB Film SL Y1-Y2</td>
<td>HS6165, HS6175</td>
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<tr>
<td>IB Film HL Y1-Y2</td>
<td>HS6185, HS6195</td>
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**For the Grade 10 Innovation Institute students only.

### Performing Arts

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<th>Course</th>
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<tbody>
<tr>
<td>Concert Choir 1</td>
<td>HS6020</td>
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<td>9,10,11,12</td>
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<tr>
<td>Concert Choir 2</td>
<td>HS6021</td>
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<tr>
<td>Concert Band 1</td>
<td>HS6022</td>
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<td>Concert Band 2</td>
<td>HS6023</td>
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<tr>
<td>Orchestra 1</td>
<td>HS6024</td>
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<td>Orchestra 2</td>
<td>HS6025</td>
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<tr>
<td>Music Theory, Composition and Technology</td>
<td>HS7006</td>
<td>1</td>
<td>9,10,11,12</td>
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<tr>
<td>Guitar 1</td>
<td>HS6026</td>
<td>1</td>
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<td>Guitar 2</td>
<td>HS6027</td>
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<td>IB Music SL Y1-Y2</td>
<td>HS6111, HS6121</td>
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<td>IB Music HL Y1-Y2</td>
<td>HS6131, HS6141</td>
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<tr>
<td>Introduction to Theatre</td>
<td>HS6029</td>
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<td>Advanced Theatre</td>
<td>HS6030</td>
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<td>Audio Production</td>
<td>HS6034A (S1) HS6034B (S2)</td>
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<td>Dance 1-2</td>
<td>HS7010</td>
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<td>IB Dance SL Y1-Y2</td>
<td>HS7013, HS7023</td>
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<td>IB Dance HL Y1-Y2</td>
<td>HS7023, HS7043</td>
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<td>IB Theatre SL Y1-Y2</td>
<td>HS6112, HS6122</td>
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<tr>
<td>IB Theatre HL Y1-Y2</td>
<td>HS6132, HS6142</td>
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### Applied Arts

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<tbody>
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<td>Intro to Physical Computing</td>
<td>HS7018</td>
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<td>Advanced Physical Computing</td>
<td>HS7028</td>
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<tr>
<td>Introduction to Robotics</td>
<td>HS8011</td>
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<tr>
<td>Web Design &amp; Virtual Reality</td>
<td>HS6009</td>
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<tr>
<td>Game Design and Development</td>
<td>HS8403</td>
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### Physical & Health Education

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<td>Physical &amp; Health Education 1</td>
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<td>Physical &amp; Health Education 2</td>
<td>HS7001</td>
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<td>PE 3 – Personal Fitness</td>
<td>HS7002</td>
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<tr>
<td>PE 3 – Swimming &amp; Water Safety Instructor</td>
<td>HS7006</td>
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<tr>
<td>PE 3 – Lifeguarding</td>
<td>HS7007</td>
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### Elective Courses

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<td>Theory of Knowledge Y1-Y2</td>
<td>HS8101, HS8102</td>
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<td>AP Research</td>
<td>HS8400</td>
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<tr>
<td>AP Computer Science Principles: Gaming in Python</td>
<td>HS4135</td>
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<td>AP Computer Science Principles: Cyber Security in Python</td>
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<td>AP Computer Science A</td>
<td>HS8201</td>
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<tr>
<td>IB Computer Science HL Y1-Y2</td>
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<tr>
<td>IB Sports, Exercise, &amp; Health Science SL/HL Y1-Y2</td>
<td>HS7050, HS7051</td>
<td>Science</td>
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<tr>
<td>IB English A: Literature SL/HL (two-year course)</td>
<td>HS8115, HS8125</td>
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### Learning Support

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### Online Learning

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<td>Pamoja Education</td>
<td>HS0</td>
<td>TBD</td>
<td>11,12</td>
</tr>
<tr>
<td>Virtual High School</td>
<td>HS9100</td>
<td>TBD</td>
<td>11,12</td>
</tr>
<tr>
<td>Global Online Academy</td>
<td>HS9103</td>
<td>TBD</td>
<td>11,12</td>
</tr>
</tbody>
</table>

### English Courses

#### English Department Flow Chart

- **English 9**
- **English 10**

**Grade 9 students must enroll in:**

- English 9

**Grade 10 students must enroll in:**

- English 10

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

- English 11
- AP English Language & Composition
- IB English A: Literature SL/HL (two-year course)

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

- English 12
- AP English Language & Composition
- IB English A: Literature SL/HL (two-year course)

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**Legend**

- AP course
- IB course
- SAS course
English 9
Course Code: HS1000
Duration: Year
Prerequisites: None
Credits: 1.0

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

English 10
Course Code: HS1001
Duration: Year
Prerequisites: English 9
Credits: 1.0

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

English 11
Course Code: HS1002
Duration: Year
Prerequisites: English 10
Credits: 1.0

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

IB English A: Literature SL/HL
Course Codes: HS1110 (SL Y1); HS1120 (SL Y2); HS1130 (HL Y1); HS1140 (HL Y2)
Duration: Two years
Prerequisites: English 10
Credits: 2.0

This course is designed for students interested in developing their analytical skills through the study of literary texts. The areas of exploration in the course include:
- Readers, writer and texts – exploring the nature and purpose of literature and the ways in which texts can be read, interpreted and responded to
- Time and Space – draws attention to the fact that texts are not isolated entities, but are connected to space and time
- Intertextuality: connecting texts – focuses on the connections between and among diverse texts, traditions, creators and ideas

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

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

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

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

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

The Language and Literature course is designed to encourage students to question the meaning generated by language and texts. Students will develop their analytical skills through the study of literary texts, nontraditional texts and topics dealing with language in cultural contexts, and language in mass communication.

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

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

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

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

All students are expected to read 13 texts, some in translation, in order to complete the IB assessment tasks.

At Higher Level, a greater depth of material is covered and students read 16 texts, some in translation, in order to complete the IB assessment tasks.

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

IB English A: Language & Literature SL/HL
Course Codes: HS1111 (SL Y1); HS1121 (SL Y2); HS1131 (HL Y1); HS1141 (HL Y2)
Duration: Two years
Prerequisites: English 10
Credits: 2.0

This course is designed for students interested in developing their analytical skills through the study of literary texts. The areas of exploration in the course include:
- Readers, writer and texts – exploring the nature and purpose of literature and the ways in which texts can be read, interpreted and responded to
- Time and Space – draws attention to the fact that texts are not isolated entities, but are connected to space and time
- Intertextuality: connecting texts – focuses on the connections between and among diverse texts, traditions, creators and ideas

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

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

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

All students are expected to read 13 texts, some in translation, in order to complete the IB assessment tasks.

At Higher Level, a greater depth of material is covered and students read 16 texts, some in translation, in order to complete the IB assessment tasks.

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

AP English Language & Composition
Course Code: HS1200
Duration: Year
Prerequisites: English 10
Credits: 1.0

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

AP English Literature & Composition
Course Code: HS1201
Duration: Year
Prerequisites: English 10
Credits: 1.0

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

By: Mandy Wang

By: Sara Kaste
Students entering IM1 in 9th grade

Integrated Math 1 (IM1)
Course Code: HS3203
Duration: Year
Prerequisites: Pre-Algebra equivalent
Credits: 1.0
Integrated Math 1 is the first of a three-course sequence based on Common Core State Standards. Integrated Math 1 topics include recognizing and developing patterns using tables, graphs, and equations. Mathematical modeling is stressed as a methodology for approaching the solution to problems. Students will explore operations on algebraic expressions and apply mathematical properties to algebraic equations. Students will problem solve using equations, graphs and tables, and investigate linear relationships, including comparing and contrasting options and decision-making using algebraic models. Reinforcement of topics from two-dimensional Geometry is integrated into this curriculum. This includes applications from the areas of perimeter and area, the Pythagorean Theorem and its applications, as well as geometric proportion. Technology will be introduced and expand upon the areas of study listed above. This course requires students to have a TI-Nspire calculator (Non-CAS version).

Integrated Math 2 (IM2)
Course Code: HS3205
Duration: Year
Prerequisites: Integrated Math 1
Credits: 1.0
Integrated Math 2 is the second course of the Integrated Mathematics progression based on Common Core State Standards. This course continues to explore functions through different representations of quadratic, exponential, trigonometric and other relationships while connecting the ideas and algebra of irrational numbers. An introduction to proofs includes but is not limited to trigonometric ratios, similarity and circle theorems. Basic 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 and using data to build models. A main focus of this course is the application of main ideas in new and different contextual situations. This course requires students to have a TI-Nspire calculator (Non-CAS version).

Integrated Math 3 Plus (IM3+)
Course Code: HS3208
Duration: Year
Prerequisites: Integrated Math 2
Credits: 1.0
Integrated Math 3 Plus is the third course of the Integrated Mathematics progression based on Common Core State Standards, but the content of the regular Integrated Math 3 course will be explored at a deeper level and the course also covers additional content. This course continues to explore functions through different representations of polynomial, rational, radical, exponential and trigonometric relationships. Emphasis will be placed on applying trigonometric concepts to general triangles, the unit circle, trigonometric equations, and identities. Additional topics include statistics and probability with emphasis on statistical inference and using data for mathematical modeling. The 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 advanced trigonometric modeling, and complex number algebra. This course requires students to have a TI-Nspire calculator (Non-CAS version).

Pre-Calculus
Course Code: HS3204
Duration: Year
Prerequisites: IM3
Credits: 1.0
The major focus of this course is on functions. Topics covered include relations, functions and their graphs, polynomials, rational functions, exponential and logarithmic functions, right triangle trigonometry, laws of sines and cosines, trigonometric identities, graphing of sine and cosine functions and trigonometric modeling. This course is designed for students with gaps in Algebra and prepares them for Calculus. Students are required to purchase a TI-Nspire calculator (Non-CAS version).

Calculus
Course Code: HS3206
Duration: Year
Prerequisites: Pre-calculus
Credits: 1.0
This course explores limits, derivatives of algebraic and transcendental functions, differentiation techniques, related rates, definite integrals, infinite integrals and anti-differentiation, numerical integration, areas of planar regions, volumes and surface areas of solids of revolution. Students are required to purchase a TI-Nspire calculator (Non-CAS version)

Students entering IM2 in 9th grade

Integrated Math 1 (IM1)
Course Code: HS3203
Duration: Year
Prerequisites: Pre-Algebra equivalent
Credits: 1.0
Integrated Math 1 is the first of a three-course sequence based on Common Core State Standards. Integrated Math 1 topics include recognizing and developing patterns using tables, graphs, and equations. Mathematical modeling is stressed as a methodology for approaching the solution to problems. Students will explore operations on algebraic expressions and apply mathematical properties to algebraic equations. Students will problem solve using equations, graphs and tables, and investigate linear relationships, including comparing and contrasting options and decision-making using algebraic models. Reinforcement of topics from two-dimensional Geometry is integrated into this curriculum. This includes applications from the areas of perimeter and area, the Pythagorean Theorem and its applications, as well as geometric proportion. Technology will be introduced and expand upon the areas of study listed above. This course requires students to have a TI-Nspire calculator (Non-CAS version).

Integrated Math 2 (IM2)
Course Code: HS3205
Duration: Year
Prerequisites: Integrated Math 1
Credits: 1.0
Integrated Math 2 is the second course of the Integrated Mathematics progression based on Common Core State Standards. This course continues to explore functions through different representations of quadratic, exponential, trigonometric and other relationships while connecting the ideas and algebra of irrational numbers. An introduction to proofs includes but is not limited to trigonometric ratios, similarity and circle theorems. Basic 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 and using data to build models. A main focus of this course is the application of main ideas in new and different contextual situations. This course requires students to have a TI-Nspire calculator (Non-CAS version).

Integrated Math 3 Plus (IM3+)
Course Code: HS3208
Duration: Year
Prerequisites: Integrated Math 2
Credits: 1.0
Integrated Math 3 Plus is the third course of the Integrated Mathematics progression based on Common Core State Standards, but the content of the regular Integrated Math 3 course will be explored at a deeper level and the course also covers additional content. This course continues to explore functions through different representations of polynomial, rational, radical, exponential and trigonometric relationships. Emphasis will be placed on applying trigonometric concepts to general triangles, the unit circle, trigonometric equations, and identities. Additional topics include statistics and probability with emphasis on statistical inference and using data for mathematical modeling. The 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 advanced trigonometric modeling, and complex number algebra. This course requires students to have a TI-Nspire calculator (Non-CAS version).

Pre-Calculus
Course Code: HS3204
Duration: Year
Prerequisites: IM3
Credits: 1.0
The major focus of this course is on functions. Topics covered include relations, functions and their graphs, polynomials, rational functions, exponential and logarithmic functions, right triangle trigonometry, laws of sines and cosines, trigonometric identities, graphing of sine and cosine functions and trigonometric modeling. This course is designed for students with gaps in Algebra and prepares them for Calculus. Students are required to purchase a TI-Nspire calculator (Non-CAS version).

Calculus
Course Code: HS3206
Duration: Year
Prerequisites: Pre-calculus
Credits: 1.0
This course explores limits, derivatives of algebraic and transcendental functions, differentiation techniques, related rates, definite integrals, infinite integrals and anti-differentiation, numerical integration, areas of planar regions, volumes and surface areas of solids of revolution. Students are required to purchase a TI-Nspire calculator (Non-CAS version).
IB Mathematics: Application and Interpretation SL Y1-Y2
Course Codes: HS313 (Y1), HS312 (Y2)
Duration: Two years
Prerequisites: IMS or above. Grade 11-12 only
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 (Non-CAS version).

IB Mathematics: Application and Interpretation HL Y1-Y2
Course Codes: HS314 (Y1), HS314 (Y2)
Duration: Two years
Prerequisites: IMS or higher. Grade 11-12 only
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 described in SL AI, the HL AI course includes logarithms, complex numbers, polar form, matrices, composite functions, and vectors. This course will also explore differentiation, integration, Probability and Statistics to a much greater depth than the SL AA 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 excellent study habits. Students are required to purchase a TI-Nspire calculator (Non-CAS version).

IB Mathematics: Analysis and Approaches SL Y1-Y2
Course Codes: HS315 (Y1), HS314 (Y2)
Duration: Two years
Prerequisites: IMS or above.
Credits: 2.0
This course provides the opportunity to prepare for Calculus AB and BC and establish a strong foundation in functions. It covers a range of essential topics, including functions and their properties, polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, conic sections, and sequences and series.

Throughout the course, students will actively develop their problem-solving skills and gain a comprehensive understanding of functions through the analysis of graphs, numerical representations, and equations. The primary goal is to foster a deep conceptual understanding of functions and their dynamic relationships. Students will also learn to construct function models based on data and effectively interpret information with accuracy.

Moreover, this course emphasizes the application of knowledge in real-life contexts, enabling students to connect their learning to practical situations and cultivate critical thinking abilities. By providing a solid foundation, AP Precalculus equips students with the opportunity to pursue a TI-Nspire calculator (Non-CAS version).

IB Mathematics: Analysis and Approaches HL Y1-Y2
Course Codes: HS316 (Y1), HS314 (Y2)
Duration: Two years
Prerequisites: IMS or IMS+
Credits: 2.0
This course is designed to provide students with the opportunity to compare and contrast.

Writing a mathematical exploration and working on precise math communication are significant parts of this course. IB Math HL AA is designed for students with a strong background in mathematics, technology, mathematics or the physical sciences. In addition to the topics described in SL AA, the HL AA course includes complex numbers, polar forms, and vectors. This course will also explore functions, differentiation, integration, and statistics to a much greater depth than the SL AA 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 excellent study habits. Students are required to purchase a TI-Nspire calculator (Non-CAS version).

AP Pre-Calculus
Course Code: HS3102
Duration: Year
Prerequisites: IMS or IMS+
Credits: 1.0
This course is designed to provide students with the opportunity to compare and contrast.

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 (Non-CAS version).

AP Calculus AB
Course Code: HS3200
Duration: Year
Prerequisites: Pre-Calculus or AP Pre-Calculus
Credits: 1.0
This course explores the major topics required for AP Calculus AB, and is equivalent to the first semester of a traditional college calculus course. Topics include limits, derivatives of algebraic and transcendental functions, differentiation techniques, extremization, related rates, Riemann sums and the definite integral, indefinite integrals and anti-differentiation, numerical integration, areas of planar regions, and volumes and surface area of solids of revolution.

Students are required to purchase a TI 84+ calculator. All students enrolled in an AP subject must sit the external exam at the end of the school year. Students are required to purchase a TI-Nspire calculator (Non-CAS version).

AP Calculus BC
Course Code: HS3201
Duration: Year
Prerequisites: AP Pre-Calculus or AP Calculus AB
Credits: 1.0
This course offers a highly accelerated and demanding academic experience characterized by a fast-paced and rigorous curriculum. It features an accelerated version of AP Calculus AB, allowing students to cover the BC syllabus within a single year. This course is equivalent to the first two semesters of university-level calculus. The major topics include those listed in AB Calculus and the additional BC-level topics: improper integrals and further applications of integrals, differential equations and Euler's method, L'Hopital's rule, analysis of planar curves, polynomial approximations, series, parametric, polar, and vector functions. The offering of this course is subject to enrollment. Students are required to purchase a TI-Nspire calculator (Non-CAS version). All students enrolled in an AP subject must sit the external exam at the end of the school year.

Multivariable Calculus & Series
Course Code: HS3204
Duration: Year
Prerequisites: AP Calculus BC
Credits: 1.0
This course is equivalent to a third semester college calculus course. Students investigate the geometry of three-dimensional curves and surfaces, and extend the single-variable concepts of derivatives and integrals to three and more dimensions. The process of finding a minimum or maximum value of a function of several variables is illustrated, and the techniques used to find the volume of a three-dimensional region and the average value of a given function over such a region are explored. Differential and integral calculus of several variables are the focal points of this college-level course which extends the BC Calculus experience to three dimensions, culminating in several calculus applications to physics including Stokes', Green's, and Gauss' Theorems. Students are required to have a TI-Nspire calculator (Non-CAS version).
Grade 10 students may choose any of the courses below based on meeting prerequisites:

- AP Macroeconomics
- AP Microeconomics
- AP US History
- AP World History: Modern

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

- IB Psychology HL/SL (two-year course)
- IB Global Politics HL/SL (two-year course)
- IB Economics HL/SL (two-year course)
- IB History SL/HL (two-year course)

Legend:
- AP course
- IB course
- SAS course

* These courses will be taught online through Pamoja.

Asian History
Course Code: HS2000
Duration: Year
Prerequisites: None
Credits: 1.0
Asian History fulfills the Grade 9 Social Studies requirement. This is a general survey course designed to better acquaint students with the history of China. More importantly, it is a course designed to enhance students’ ability to think critically. Students develop their skills in analyzing primary and secondary sources and developing historical arguments in writing. Developing this skill set, students ultimately seek to answer the question “How do we tell the story of history?”

US History
Course Code: HS2002
Duration: Year
Prerequisites: Asian History
Credits: 1.0
U.S. History is a course that will look at major historical events that shaped the identity of the United States. The primary focus of the course is the mid 19th century to the present. The curriculum structure of this course will focus on themes in which students will develop an understanding of the struggles, opportunities, and challenges that have faced America throughout its history. Students will be taught to think critically, develop writing skills, analyze documents and develop historical thinking skills that will prepare them for continued study in the Social Studies area.

Sociology
Course Code: HS2009
Duration: Year
Prerequisites: Grade 11 or Grade 12
Credits: 1.0
This year-long 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.

Applied Economics & Business
Course Code: HS2018
Duration: Year
Prerequisites: Grade 11 or Grade 12
Credits: 1.0
The Applied Business and Economics course aims to equip students with a deeper understanding of the business world through the lens of economics and the market, conducting market research and product development, creating effective marketing and advertising plans, designing business strategies and branding, and managing business finances. As a culmination, students will develop the ability to tell their own products or services. This practical experience further reinforces their understanding of business concepts and enhances their entrepreneurial skills.
IB Environmental Systems & Society SL Y1-Y2 + HL Y1
Course Codes: HS4105 (Y1), HS4125 (Y2)
Duration: Two years
Prerequisites: Biology Lab Science
Credits: 2.0
Prerequisites: Grade 11 or Grade 12
IB Economics SL/HL Y1-Y2
Course Codes: HS2125 (SL Y1), HS2125 (SL Y2); HS2125 (HL Y1), HS2125 (HL Y2)
Duration: Two years
Prerequisites: Grade 11 or Grade 12
Credits: 2.0
IB Psychology SL/HL Y1-Y2
Course Codes: HS2175 (SL Y1), HS2175 (SL Y2); HS2175 (HL Y1), HS2175 (HL Y2)
Duration: Two years
Prerequisites: Grade 11 or Grade 12
Credits: 2.0
IB Global Politics SL/HL Y1-Y2
Course Codes: HS2165 (SL Y1), HS2165 (SL Y2), HS2165 (HL Y1), HS2165 (HL Y2)
Duration: Two years
Prerequisites: Grade 11 or Grade 12
Credits: 2.0
IB Business Management SL/HL Y1-Y2
Course Codes: HS2117 (SL Y1), HS2117 (SL Y2); HS2117 (HL Y1), HS2117 (HL Y2)
Duration: Two years
Prerequisites: Full IB Diploma Students
Credits: 2.0
IB AP Seminar
Course Code: HS2208
Duration: Year
Prerequisites: Grade 10 or Grade 11
Credits: 1.0
This is foundational course of the AP Capstone Program provides students with opportunities to think critically and creatively, research, explore, pose solutions, develop arguments, collaborate, and communicate using various media. Students explore real-world issues through a cross-curricular lens and consider multiple points of view to develop deep understanding of complex issues as they make connections between these issues and their own lives. Students read articles, research studies, and foundational and philosophical texts; listen to and view speeches, broadcasts, and personal accounts; and explore artistic and literary works to gain a rich appreciation and understanding of issues. All students enrolled in an AP subject must sit the external exam at the end of the school year.

IB AP History
Course Code: HS2201
Duration: Year
Prerequisites: Grade 11 or Grade 12
Credits: 1.0
The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing. All students enrolled in an AP subject must sit the external exam at the end of the school year.
AP Microeconomics
Course Code: HS2209
Duration: Year
Prerequisites: Grade 11 or Grade 12
Credits: 1.0

The year-long Advanced Placement (AP) Microeconomics course provides a comprehensive study of microeconomic theory and its practical applications. Students will analyze supply and demand, consumer behavior, production theory, and market equilibrium. They will explore market structures, government intervention, and market failures. Through graphical analysis, mathematical reasoning, and real-world examples, students will develop critical thinking, problem-solving, communication, and collaboration skills.

Moreover, this course will allow students to develop their ethical global citizenship by applying economic skills to case studies and analyzing economic models and theories to the real world. Through research, data collection, and analysis, students will be able to make sense of theories of societal and firm efficiency while questioning today’s business model of profits seeking in a world facing pressing issues such as climate crisis. In this respect, a unique feature of this course is the market failure project that engages students in investigating their local community to identify a market failure and propose a solution.

The course prepares students for the AP Microeconomics exam through practice with multiple-choice and free-response questions, which all in the Spring.

AP Macroeconomics
Course Code: HS2210
Duration: Year
Prerequisites: Grade 11 or Grade 12 Credits: 1.0

The year-long AP Macroeconomics course offers a comprehensive study of macroeconomic principles and their practical applications in the real world. Students will analyze economic indicators such as GDP, inflation, and unemployment, and investigate the factors that influence economic growth and fluctuations. They will also examine fiscal and monetary policies, international trade, and the role of governments and Central Banks through fiscal and monetary policies; they will apply critical analysis, problem-solving, and data interpretation to case studies. Finally, students will be able to gain an overall understanding of macroeconomic concepts and be able to identify their implications in other contexts or disciplines. The course will prepare students for the AP Macroeconomics Spring exam by honing their analytical skills and effective communication of economic ideas in free response prompts.

AP World History: Modern
Course Code: HS2206
Duration: Year
Prerequisites: Asian History
Credits: 1.0

AP World History is an intensive, college-level course designed to explore human history from 1200 C.E. to the present, emphasizing the development of analytical and writing skills necessary for success at a collegiate level and in preparation for the Advanced Placement exam. Strong English reading comprehension and writing skills are the primary requirements. The course covers a significant period of time in the critical evaluation of primary and secondary sources, analysis of historiography (the principles, theories, or methodology of scholarly historical research and presentation), and inquiry into global connections that have shaped our present world. This course requires a great deal of self-motivation and independent learning. All students enrolled in an AP subject must sit the external exam at the end of the school year.

AP Biology
Course Code: HS2205
Duration: Year
Prerequisites: Grade 11 or Grade 12
Credits: 1.0

This course will provide students with the conceptual tools necessary to develop an understanding of some of the world’s diverse political structures and practices. The course encompasses the study of both specific countries and their governments, as well as general concepts used to interpret the political relationships and institutions found in virtually all national politics. Six countries — United Kingdom, Russia, China, Mexico, Iran, and Nigeria — represent the AP Comparative Government and Politics case study countries. They are taught because they provide a foundation for developing an understanding of different types of political systems. The course is approached through the following five units: Political systems, regimes and governments, Political institutions, Political culture and participation, Party and Electoral Systems and Citizen Organizations and Political and Economic Changes and Development. All students enrolled in an AP subject must sit the external exam at the end of the school year.

Grade 9 students must enroll in:
- Physics-Chemistry Lab Science

Grade 10 students must enroll in:
- Biology Lab Science

Grade 11 students may choose any of the courses below based on meeting prerequisites:
- AP Physics 1
- AP Biology
- Chemistry
- IB Physics SL/HL
- IB Environmental Systems & Society SL/HL
- IB Biology SL/HL
- IB Chemistry SL/HL
- IB Sports, Exercise, & Health Science SL/HL
- AP Chemistry

Grade 12 students may choose any of the courses below based on meeting prerequisites:
- AP Physics 1
- AP Biology
- Chemistry
- AP Physics C Mechanics
- AP Physics C Electricity & Magnetism
- IB Environmental Systems & Society SL Y1 + HL Y1
- AP Chemistry

Legends:
- AP course
- IB course
- SAS course
Physics-Chemistry Lab Science
Course Code: HS4007
Duration: Year
Prerequisites: This course is for grade 9 students
Credits: 1.0
This lab science course focuses on the use of science and engineering practices to develop conceptual understandings in basic chemistry and physics. This course also explores cross-cutting concepts that unite the sciences and allow students to make connections between the sciences. Each student will also be required to complete an independent investigation or engineering design project that further explores an area of student interest with a physical science conceptual focus. This grade 9 lab science course is based on the Next Generation Science Standards and focuses on Physics and Chemistry. Through units on: motion; energy conservation; momentum; electrostatics; chemical reactions; factors that affect chemical reactions; equilibrium.

Earth & Space Science
Course Code: HS4029
Duration: Year
Prerequisites: Biology Lab Science
Credits: 1.0
This course is based on the Next Generation Science Standards (NGSS) and seeks to prepare students to develop a better understanding of the major ideas that are important on the global stage.
1. How do human actions affect the environment?
2. How does Earth's climate system work?
3. How do Earth's systems interact?
4. What can we do to improve our environment?

IB Environmental Systems & Society SL Y1-Y2 + HL Y1
Course Code: HS4115 (Y1), HS4225 (Y2)
Duration: Two years
Prerequisites: Biology Lab Science
Credits: 1.0 Science credit (Y1), 1.0 Social Studies credit (Y2)

IB Physics SL/HL Y1-Y2
Course Code: HS4122 (SL Y1), HS4122 (SL Y2), HS4132 (HL Y1); HS4142 (HL Y2)
Duration: Two years
Prerequisites: Biology Lab Science
Credits: 2.0
IB Physics is a two-year course designed for students who want to be introduced to a wide variety of physics areas. The course is organized into five themes, i) Space, motion, and time, ii) The nature of matter, iii) Waves and particles, iv) Electricity and magnetism, v) Nuclear and Quantum Physics. IB Physics recommended for those that would like to pursue an engineering or physics-based course at university. A solid understanding of algebraic manipulation is recommended to be successful in the course.

AP Biology
Course Code: HS4200
Duration: Year
Prerequisites: Biology Lab Science
Credits: 1.0
The AP Biology course is designed to help students develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, using models, justifying claims and connecting concepts in and across domains. The conceptual study of the course is based on the four following big ideas: 1) The process of evolution drives the diversity and unity of life; 2) Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis; 3) Living systems store, retrieve, transmit, and respond to information essential to life processes; 4) Biological systems interact, and these systems and their interactions possess complex properties. This AP Biology course is equivalent to a two-semester college introductory biology course. Every student enrolled in this course must sit the external exam at the end of the year.
AP Chemistry  
Course Code: HS4201  
Duration: Year  
Prerequisites: Biology Lab Science  
Credits: 1.0  
The AP Chemistry course is designed to be the equivalent of the general first year university chemistry course taken by college freshmen. A range of topics are covered, spanning physical and analytical chemistry. The major units in the course are centered around the ‘Big Ideas’ from the College Board. The units include:  
- Introduction/Scientific Method  
- Atomic Structure  
- Periodicity  
- Chemical Bonding and Properties  
- Stoichiometry  
- Thermochemistry  
- Gases, Liquids, Solids  
- Equilibrium  
- Acids and Bases  
- Kinetics  
- Electrochemistry

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

AP Physics 1  
Course Code: HS4210  
Duration: Year  
Prerequisites: Biology Lab Science; IM3 or higher level Math course  
Credits: 1.0  
This algebra based AP Physics program provides a systematic study of the principles of physics and emphasizes the development of critical thinking and problem-solving ability. The course covers Newtonian mechanics including rotational dynamics and angular momentum, work, energy and power, fluids. It is assumed that the student is familiar with algebra and basic trigonometry. This course offers the essential foundation in physics, preparing students for science related courses. All students enrolled in an AP Subject must sit the external exam at the end of the school year.

AP Physics C: Mechanics  
Course Code: HS4208  
Duration: Year  
Prerequisites: Biology Lab Science; IM3+ or Advanced Pre Calculus Math  
Course  
Credits: 1.0  
This calculus based physics course is a recommended option for any students considering engineering or physics based degrees at university. The course covers seven units across the wide area of mechanics, the units are  
- Kinematics  
- Newton’s Laws of Motion  
- Work, Energy, and Power  
- Systems of particles and Linear momentum  
- Rotation  
- Oscillations  
- Gravitation

The course will involve learning how to apply calculus to model more real life physics situations and a large component of experimental work/project based assessment. Completing a calculus based math course previously or concurrently is not required but a strong mathematical background such as pre-calculus is highly recommended. This course will teach the calculus required for Physics C Mechanics within it. This course is required to register for AP Physics C: Electricity and Magnetism.

AP Physics C: Electricity & Magnetism  
Course Code: HS4209  
Duration: Year  
Prerequisites: Biology Lab Science; IM3+ or Advanced Pre Calculus Math Course; Completion of AP Physics C Mechanics in advance or concurrently taking the course.  
Course  
Credits: 1.0  
This calculus based physics course is a good option for any students considering engineering or physics based degrees at university, but is less of a requirement than the Mechanics course. The course covers five units across the wide area of electricity and magnetism, the units are  
- Electrostatics  
- Conductors, Capacitors, and Dielectrics  
- Magnetic Fields  
- Electromagnetism

The course will involve learning how to apply calculus to model more real life physics situations and a large component of experimental work/project based assessment. Completing a calculus based math course previously or concurrently is not required but a strong mathematical background such as pre-calculus is highly recommended. Completion of AP Physics C Mechanics or taking the two courses concurrently is a pre-requisite for this course.
Accelerated Beginner French
Course Code: HS 5054
Duration: One Year
Prerequisites: None
Credits: 1.0
This course is for Grade 9 students who are complete or almost complete beginners, with no more than one year of experience studying the language. It is a fast-paced and demanding course covering 3 semesters in two. Students will be introduced to vocabulary, grammar, and culture across a wide range of common topics designed to quickly build their communication skills. By the end of the course, students will be able to hold a 5-minute conversation and write a 100-150-word text. Students will also be able to understand audio and written texts on common topics. Students will also be able to communicate in the past, present, and future.

Intermediate Low French
Course Code: HS 5055
Duration: One Year
Prerequisites: More than one year of studies in Middle School, or teacher recommendation
Credits: 1.0
This course is for Grade 9 students who have more than one year of experience studying the language in Middle School. The course consolidates and reviews the skills, grammar, and vocabulary learned up to this point in a range of familiar and unfamiliar contexts. This course introduces new tenses and more complex grammatical patterns. It is also a continued study of Francophone cultures. By the end of the year, students will be capable communicators, who are able to converse in French on a variety of topics, take part in simple discussions, and write a minimum of 150 words for different purposes. Students will be assessed regularly with quizzes and tests, projects, reading and listening comprehension tasks, written compositions, oral presentations, and conversations. Students completing this course would usually progress to Intermediate High French.

Intermediate French
Course Code: HS5055
Duration: One Year
Prerequisites: Beginner French Course or teacher recommendation
Credits: 1.0
This course is primarily for Grade 10 students who have studied the Beginner French Course in Grade 9. It is a fast-paced and demanding course covering 3 semesters in two. Students will be introduced to vocabulary, grammar, and culture across a wider range of common topics designed to quickly build their communication skills in preparation for further study at the IB level. By the end of the course, students will be able to understand and converse in French on a variety of topics, take part in more abstract topics and themes in preparation for further study at IB Higher Level.

Intermediate High French
Course Code: HS 5057
Duration: One Year
Prerequisites: Intermediate Low French Course.
Credits: 1.0
This course is primarily for Grade 10 students who have studied the Intermediate Low French Course in Grade 9. This intermediate course aims to develop students’ autonomy by extending the skills, grammar and vocabulary learned previously. It extends intercultural competency through an exploration of Francophone cultures. The course uses a range of authentic resources (texts, interactive websites, songs, movies, etc.) to emphasize learning through various approaches and to give students opportunities to express themselves in an increasingly comfortable manner at a high intermediate level. By the end of the year, students will be able to hold effective conversations, who are able to understand and converse in French on a variety of topics and for a variety of purposes. Students will be assessed regularly with quizzes and tests, reading, and listening comprehension tasks, as well as written and interactive oral productions. Students will begin to explore more abstract topics and themes in preparation for further study at IB Higher Level.

IB French B SL/HL Y1-Y2
Course Code: HS5110 (SL Y1); HS5120 (SL Y2); HS5130 (HL Y1); HS5140 (HL Y2)
Duration: Two years
Prerequisites: Intermediate French Course, or Intermediate High French Course or other recommendation
Credits: 2.0
French B is a language acquisition course primarily designed for students with solid previous experience in the target language. In the Language B course, students further develop their ability to communicate in French through the study of language, themes, and texts. In doing so, they also develop a conceptual understanding of how languages work and international mindedness through the study of the French language and Francophone cultures. At both B SL/HL levels, students learn to communicate in French in the five prescribed themes: Identities, Experience, Human Ingenuity, Social Organization, and Sharing the Planet. The French B course provides students with a basis for further study, work, and leisure using an additional language. Students will be assessed regularly with quizzes and tests, reading, and listening comprehension tasks, as well as written and oral productions. At the end of the second year, students will sit the externally assessed IB exams. Higher Level Coursework: The study of two literary works originally written in French.

IB French Ab Initio SL Y1-Y2
Course Code: HS5115 (Y1); HS5122 (Y2)
Duration: Two years
Prerequisites: None
Credits: 2.0
The Ab Initio program is an intensive language course that covers the equivalent of three years of Spanish over the course of two years and is then assessed externally through the IB exam. It is meant for students who have no previous experience of learning the language. The program meets the needs of those IB students who have had little or no opportunity for foreign language study in their earlier education and are interested in learning a new foreign language as part of their IB Diploma. The aims of this course are to develop students’ ability to communicate in familiar and practical needs. It introduces students to Francophone cultures and countries and provides them with a foundation for further study. This course is organized into five prescribed themes: Identities, Experience, Human Ingenuity, Social Organization and Sharing the Planet. The Ab Initio program is an intensive language course that covers the equivalent of three years of Spanish over the course of two years and is then assessed externally through the IB exam. It is meant for students who have no previous experience of learning the language. The program meets the needs of those IB students who have had little or no opportunity for foreign language study in their earlier education and are interested in learning a new foreign language as part of their IB Diploma. The aims of this course are to develop students’ ability to communicate in familiar and practical needs. It introduces students to Francophone cultures and countries and provides them with a foundation for further study. This course is organized into five prescribed themes: Identities, Experience, Human Ingenuity, Social Organization and Sharing the Planet.

IB Spanish B Ab Initio SL Y1-Y2
Course Code: HS5155 (Y1); HS5156 (Y2)
Duration: Two years
Prerequisites: None – No more than one year of experience studying the language
Credits: 2.0
The Ab Initio program is an intensive language course that covers the equivalent of three years of Spanish over the course of two years and is then assessed externally through the IB exam. It is meant for students who have no previous experience of learning the language. The program meets the needs of those IB students who have had little or no opportunity for foreign language study in their earlier education and are interested in learning a new foreign language as part of their IB Diploma. The aims of this course are to develop students’ ability to communicate in familiar and practical needs. It introduces students to the culture of the countries where the language is spoken through the study of the target language; provide students with a foundation for further study of the target language; provide enjoyment and intellectual stimulation; and encourage positive attitudes towards the learning of other languages and their speakers and countries. This course is organized into five prescribed themes: Identities, Experience, Human Ingenuity, Social Organization and Sharing the Planet.

IB Spanish Ab Initio SL Y1-Y2
Course Code: HS5155 (Y1); HS5156 (Y2)
Duration: Two years
Prerequisites: None
Credits: 2.0
This course is primarily for Grade 10 students who have studied the Beginner Spanish Course in Grade 9. This is a fast-paced and demanding course covering 3 semesters in two. Students will be introduced to vocabulary, grammar, and culture across a wide range of common topics designed to quickly build their communication skills in preparation for further study at IB Standard or Higher Level. By the end of the course, students will be able to hold a 7-minute conversation and write a minimum of 150 words. Students will also be able to understand audio and written texts on common topics. Students will also be able to communicate in the past, present, and future.

Advanced Spanish
Course Code: HS5061
Duration: One Year
Prerequisites: Intermediate Spanish Course, or teacher recommendation
Credits: 1.0
This course is for Grade 9 students who are complete or almost complete beginners, with no more than one year of experience studying the language. It is a fast-paced and demanding course covering 3 semesters in two. Students will be introduced to vocabulary, grammar, and culture across a wide range of common topics designed to quickly build their communication skills. By the end of the course, students will be able to hold a 7-minute conversation and write a minimum of 150 words. Students will also be able to understand audio and written texts on common topics. Students will also be able to communicate in the past, present, and future.

Interlanguage B
Course Code: HS5062
Duration: One Year
Prerequisites: Beginner Spanish Course, or teacher recommendation
Credits: 1.0
This course is primarily for Grade 10 students who have studied the Beginner Spanish Course in Grade 9. This is a fast-paced and demanding course covering 3 semesters in two. Students will be introduced to vocabulary, grammar, and culture across a wide range of common topics designed to quickly build their communication skills in preparation for further study at IB Standard or Higher Level. By the end of the course, students will be able to hold a 7-minute conversation and write a minimum of 150 words. Students will also be able to understand audio and written texts on common topics. Students will also be able to communicate in the past, present, and future.

Intermediate Spanish
Course Code: HS5059
Duration: One Year
Prerequisites: Beginner Spanish Course, or teacher recommendation
Credits: 1.0
This course is primarily for Grade 10 students who have studied the Beginner Spanish Course in Grade 9. It is a fast-paced and demanding course covering 3 semesters in two. Students will be introduced to vocabulary, grammar, and culture across a wide range of common topics designed to quickly build their communication skills in preparation for further study at IB Standard or Higher Level. By the end of the course, students will be able to hold a 7-minute conversation and write a minimum of 150 words. Students will also be able to understand audio and written texts on common topics. Students will also be able to communicate in the past, present, and future.
IB Spanish B SL/HL Y1-Y2
Course Codes: HS5111 (SL Y1); HS5121 (SL Y2); HS5131 (HL Y1); HS5141 (HL Y2)
Duration: Two years
Prerequisites: Intermediate Spanish Course, Intermediate High Spanish Course, or teacher recommendation
Credits: 2.0
Spanish B is a language acquisition course designed for students with some previous experience of the target language. In the language B course, students further develop their ability to communicate in Spanish through the study of language, themes, and texts. In doing so, they also develop conceptual understandings of how language works and international mindedness through the study of the Spanish language and Hispanic cultures. At both levels of language B (SL and HL), students learn to communicate in Spanish in familiar and unfamiliar contexts. They describe situations, narrate events, explain problems and support their personal opinions for a variety of purposes and on a variety of topics related to the five prescribed themes: Identities, Experience, Human ingenuity, Social Organization and Sharing the planet. Spanish B provides students with a basis for further study, work, and leisure using an additional language. Students will be assessed regularly with quizzes and tests, reading, and listening comprehension tasks, as well as individual written and oral productions. At the end of the second year, students will sit the externally assessed IB exams. Higher Level Coursework: The study of two literary works originally written in Spanish.

IB Self-Taught Language A1 SL Y1-Y2
Course Codes: HS5102 (Y1); HS5103 (Y2)
Duration: Two 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.

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.

IB Chinese A: Language & Literature SL/HL (two-year course)
Advanced High (multi-year course)
Advanced Mid (multi-year course)
Advanced Low (multi-year course)
Intermediate High (multi-year course)
Intermediate Mid (multi-year course)
Intermediate Low (single-year course)
Novice (single-year course)
IB Mandarin A B lingüístico (two-year course)
IB Mandarin B SL (two-year course)
IB Mandarin B HL (two-year course)

Chinese Department Flow Chart
Note: May require support and/or summer work
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 thought, 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

Chinese curriculum offers texts, assessments as well as support for reading levels ranging from basic text of foundation literacy to advanced high level courses as well as 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
• Superior

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: Novice High oral proficiency according to ACTFL standards. This means that a student can answer a variety of familiar questions about topics related to daily life using complete sentences most of the time. When prompted, he/she can ask a variety of familiar questions.

Reading: 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: Intermediate Low oral proficiency according to ACTFL standards. This means that a student can answer a wide variety of familiar and original questions about his/her daily life. He/she answers prompts consistently in complete sentences. He/she is able to ask a variety of questions and talk about topics related to daily life in a series of sentences.

Reading: 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. Students have a vocabulary base of approximately 150 commonly used 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: Intermediate Mid oral proficiency according to ACTFL standards. This means that a student can ask and answer a wide variety of original questions about his/her daily life. He/she speaks consistently in connected sentences that show originality of thought and the ability to solve authentic problems.

Reading: Students can independently read a variety of books or text containing 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.

Intermediate High Chinese

Course Code: HS5035
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 expanding 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 oral proficiency according to ACTFL standards. This means that a student can maintain a conversation on a variety of topics of daily life and make connections to topics beyond self. He/she is able to compare and contrast ideas using paragraph length discourse adding a variety of details.

Reading: Students can independently read a variety of books and text containing 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.
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 demonstrate mastery of the following skills:

Oral language: Advanced Low oral proficiency as demonstrated by ACTFL standards. This means that a student can maintain a prolonged conversation on a few academic topics in a way that demonstrates high levels of accuracy, development of thought, and precision of vocabulary appropriate to the topic at hand.

Reading: Students can independently read a variety of books containing extended text of multiple paragraphs with little support of images or contextual clues.

Writing: Students can independently write a series of paragraphs to narrate, inform and state opinion. The text has detail and examples related to the topics. There is some formality of vocabulary.

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 oral proficiency according to ACTFL standards. This means that a student can maintain a prolonged philosophical conversations that demonstrate original connections with literature, history and current events in a nuanced and culturally sensitive manner.

Reading: Students can engage in literary analysis across a variety of genres.

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

Advanced High Chinese  
Course Code: HS5034  
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: Students demonstrate Advanced High oral proficiency according to ACTFL standards. This means that a student can engage in prolonged philosophical conversations that demonstrate original connections with literature, history and current events in a nuanced and culturally sensitive manner.

Reading: Students can engage in literary analysis across a variety of genres.

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

IB Mandarin Ab Initio SL Y1-Y2  
Course Code: HS5159 (Y1), HS5160 (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 Ab Initio.  
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 ib inter examination at the end of year 1.

IB Mandarin B SL/HL Y1-Y2  
Course Code: HS5123 (SL Y1), HS5124 (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 Code: HS5124 (SL Y1), HS5124 (SL Y2); HS5144 (HL Y1); HS5164 (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.  
Credentials: 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.

IB Chinese Superl R Course Code: HS5147  
Duration: 1-2 years  
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.
Intermediate Art Studio

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

- Art Lab
- Art Coded

Innovation Institute students will take:

- Innovation & Design (Grade 10)

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

- Art Lab
- Art Coded
- IB Film SL/HL (two-year course)

Intermediate Art Studio

Advanced Art Studio

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

Legend

- IB course
- SAS course

Visual Arts Department Flow Chart

Grade 9 students may take:

- Art Lab
- Art Coded

Art Lab

Course Code: HS6205
Duration: Year
Prerequisites: None
Credits: 1.0

This is not your typical introductory art course. Art Lab is a place to experiment and be creative. It is a place where we learn to see the world in a new way, try new things and hone our craft into meaningful artwork. In the lab, we’ll paint with a brush, but we’ll also paint with a stylus. We’ll sculpt, build and cut with our hands, but we’ll also use 3D printers, laser cutters, and the most important tool - your imagination.

Each unit will allow students to learn how to generate and develop ideas and artwork, increase their knowledge and understanding of movements and artists, and learn how to analyze, respond and become inspired. Sketchbooks, projects and class critiques will support the development of critical thinking and creativity skills. This course is a recommended prerequisite for all future art courses. Art Lab: Imagine. Craft. Build.

Art Coded

Course Code: HS6050
Duration: Year
Prerequisites: one previous art course
Credits: 1.0

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

Advanced Art Studio

Course Code: HS6208
Duration: Year
Prerequisites: Two years of art courses
Credits: 1.0

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

Innovation & Design

Course Code: HS6051
Duration: Year
Prerequisites: This course is only open to Innovation Institute Grade 10 students.
Credits: 1.0

This course allows Grade 10 students in the Innovation Institute program to build on skills developed in Creativity and Design and introduces them to new forms of contemporary media and art making. Students will analyze contemporary media and develop the skills to create effective forms of communication in both still (photography, graphic design) and moving images. Students will consider the importance of the integration of arts into STEM disciplines through design and creative thinking, in order to improve functionality and communication of meaning. To this end, students will learn how to build and test electronic circuits and create controllable electromechanical devices.
IB Visual Art SL/HL Y1-Y2
Course Codes: HS6110 (SL-Y1); HS6120 (SL-Y2); HS6130 (HL-Y1); HS6140 (HL-Y2)
Duration: Two years
Prerequisites: None
Credits: 1.0
IB Visual Art is intended for students who have a serious interest in the visual arts, and possess a high level of commitment to studio and written work. This two-year course requires students to investigate theoretical, art making, and curatorial practices. In order to be successful, students are expected to create an in-depth and personal body of work developed through an independent exploration of artists, ideas, materials and techniques. Students will generate and refine their ideas through the use of visual journals called a Process Portfolio. These journals require a dedication to and documentation of personal research and the exploration of media, technical skills, and the analysis of thematic, cultural, historical, aesthetic issues related to art. IB art students are also expected to create a comparative study in which they analyze, compare, and contrast works by self-selected artists. This research should impact on the student’s development as an artist, as well as their art making practices.

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

Please see below for requirements.

Standard Level Coursework:
Process Portfolio: SL students submit 9–18 screens which document their creative process.
Comparative Study: SL students will submit 10–15 screens which examine and compare at least three artworks.
Final Exhibition: SL students will exhibit 4–7 final pieces.

Higher Level Coursework:
Process Portfolio: HL students submit 13–25 screens which document their creative process.
Comparative Study: HL students submit 10–15 screens which examine and compare at least three artworks. HL students submit 3–5 additional screens which analyze the extent to which their work and practices have been influenced by the art and artists examined.
Final Exhibition: HL students will exhibit 8–11 final pieces.

IB Film SL/HL Y1-Y2
Course Codes: HS8165 (SL Y1); HS8175 (SL Y2); HS8185 (HL Y1); HS8195 (HL Y2)
Duration: Two years
Prerequisites: None
Credits: 2.0
Film literacy is a critical skill for the 21st century in which most of the media that we consume, and produce is delivered in this fashion. Throughout the two-year IB Film HL course, we will analyze how meaning is created and communicated in film language. We will study popular films, independent films, foreign films, and classic films. After we deconstruct these films down to their basic structures, we’ll use those building blocks to make our own powerful films that tell engaging stories. In SL and HL, we will complete a close textual analysis in year one and will be working towards two other assessments in year two. These include a comparative study of two films in a topic of your choosing and a production portfolio of your work in different film roles.
HL students are expected to complete a fourth assessment, which is a collaborative film project.

Performing Arts Department Flow Chart
Grade 9 students may choose the course below based on meeting prerequisites:
- Audio Production
- Concert Choir 1
- Concert Band 1
- Orchestra 1
- Guitar 1

Grade 10,11 and 12 students may choose any of the courses below based on meeting prerequisites:
- Advanced Theatre
- Audio Production (semester course)
- Concert Choir 2
- Concert Band 2
- Orchestra 2
- Guitar 2
- Dance 1-2

Grade 11 and 12 students may choose any of the courses above based on meeting prerequisites plus the two IB courses below.
- IB Theatre SL/HL (two-year course)
- IB Music SL/HL (two-year course)
- IB Dance SL/HL (two-year course)

Legend
- IB course
- SAS course

By: Victoria Yu
Concert Choir 1
Course Code: HS6020
Duration: Year
Prerequisites: None. Concert Choir 1 can be taken more than once.
Credits: 1.0
Concert Choir 1 is a performing group open to any student who can demonstrate an ability to match pitch and stay on a part. Choral literature of three to four parts, from the Renaissance to the present, is rehearsed and performed. Students will develop skills in vocal production, note and rhythm reading, listening, and conducting. Pianists are encouraged to audition for the accompanist role.

Concert Choir 2
Course Code: HS6021
Duration: Year
Prerequisites: Teacher placement. Concert Choir 2 can be taken more than once.
Credits: 1.0
Concert Choir 2 is a performing group open to any student who can demonstrate an ability to match pitch and stay on a part. Choral literature of three to four parts, from the Renaissance to the present, is rehearsed and performed. Students will develop skills in vocal production, note and rhythm reading, listening, and conducting. Pianists are encouraged to audition for the accompanist role.

Concert Band 1
Course Code: HS6022
Duration: Year
Prerequisites: One year previous experience required. Concert Band 1 can be taken more than once.
Credits: 1.0
Concert Band 1 (Intermediate) is open to all woodwind, brass, and percussion players who have at least one year of experience on their chosen instrument. Specific instrumental technique, ensemble skills, theoretical literacy, and historical awareness will be developed through the performance of a variety of concert band literature. This ensemble will build upon previous band experiences.

Concert Band 2
Course Code: HS6023
Duration: Year
Prerequisites: Teacher placement. Concert Band 2 can be taken more than once.
Credits: 1.0
Concert Band 2 is open to experienced woodwind, brass, and percussion players. Specific instrumental technique, ensemble skills, theoretical literacy, and historical awareness will be developed through the performance of a variety of concert band literature. This ensemble will build upon the Intermediate Concert Band experience. Please consult with your current teacher before requesting this course.

Music Theory, Composition & Technology
Course Code: HS7105
Duration: Year
Prerequisites: Teacher placement.
Credits: 1.0
Students will compose music using Ableton and Logic-Pro software. Students will examine relevant music theory and musical styles, applying the socio-cultural influences of that style to their compositions.

Orchestra 1
Course Code: HS6024
Duration: Year
Prerequisites: One year experience or permission of teacher required.
Orchestra 1 can be taken more than once.
Credits: 1.0
Orchestra 1 is open to string players who wish to gain ensemble experience. Specific instrumental techniques, ensemble skills, theoretical literacy, and historical awareness develop through the performance of a variety of orchestral literature from the Baroque period to Classical periods plus other miscellaneous repertoire. Orchestra 1 generally comprises Grade 9 and 10 students, though students from all year levels can join.

Orchestra 2
Course Code: HS6025
Duration: Year
Prerequisites: Teacher placement. Orchestra 2 can be taken more than once.
Credits: 1.0
Orchestra 2 is the advanced String Orchestra of the school and entry is by audition open to all experienced violin, viola, cello, and double bass players. Specific instrumental techniques, ensemble skills, theoretical literacy, and historical awareness develop through the performance of a variety of orchestral literature from the Romantic period to the present. Students should be able to demonstrate a variety of "off the string" bow strokes.

IB Music SL/HL Y1-Y2
Course Code: HS6111 (SL Y1); HS6121 (SL Y2); HS6131 (HL Y1); HS6141 (HL Y2)
Duration: 2 years
Prerequisites: Prior knowledge of music performance, theory and styles
Credits: 1.0
IB Music is a project-based course that examines music through the holistic tripartite lenses of Perform, Explore and Experiment. Projects use all three components with differing emphases, engaging with music through understanding, making and creating. Students engage with music on personal, local and global levels, and examine four differing aspects of music, examining topics that allow for connections with a variety of musical stimuli. Additionally, Higher Level students will engage in a long-term project to prepare a multimedia presentation based on that long-term project.

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

Introduction to Theatre
Course Code: HS6029
Duration: Year
Prerequisites: None
Credits: 1.0
As a set of staged practices rich with social context, theater has sought to document, engage, and affect communities. This course introduces and explores theater from page to stage as a live performance art. Topics include the relationship between theater and society (historical and contemporary), dramatic structure, theatrical representation, and the crafts of theater artists such as directors, designers, playwrights, and actors. Students will engage with each other on stage through performance exercises and explore storytelling through theatre design elements.

Guitar 1
Course Code: HS6026
Duration: Year
Prerequisites: None. Guitar 1 can be taken more than once.
Credits: 1.0
This is an introductory course dealing with the techniques and styles of guitar playing. Students will have hands-on experience with chords, plucking, and reading notes as well as tablature. Studies will be done through a variety of styles of music, from classical/flamenco to folk and rock and roll.

Guitar 2
Course Code: HS6027
Duration: Year
Prerequisites: Guitar 1 or prior private lessons required for this course. Guitar 2 can be taken more than once.
Credits: 1.0
This course builds on the techniques learned in the Guitar 1 class. Students will have hands-on experience with more advanced chord progressions, strumming patterns, and note/tablature reading. In addition, students will gain experience in a variety of finger picking styles and open tunings. Studies will be done through a variety of styles of music, from classical/flamenco to folk and rock and roll.

Audio Production
Course Code: HS6034A (Semester 1); HS6034B (Semester 2)
Duration: Semester
Prerequisites: None
Credits: 0.5
This course will explore the multi-faceted world of the music industry by providing students the basic knowledge, training and technical skills necessary to operate the equipment required to produce a finished audio product in both studio situations and live performance. Through both theory and practice students will learn what it means to produce a variety of styles of music from recording, mastering to publishing and promotion. This course may be repeated for credit.

By: Mandy Wang
Dance 1-2
Course Codes: HS7010 and HS7011
Duration: 0.5 or 1 semester
Prerequisites: None
Credits: 0.5 credit or 1 year
Credit: 1 credit (Performing Arts elective or PE credit)
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.

IB Dance SL/HL Y1-Y2
Course Codes: HS7015, HS7026, HS7035, HS7043
Duration: 2 years
Prerequisites: Dances 2 or permission from the teacher.
The IB dance course is for students to delve deeper into the art form of dance through performance, creative and analytical skills. The course focuses on the composition, performance and analysis of dance, or “expressive movement,” which is practiced amongst peoples of various backgrounds, and for a variety of purposes, throughout the world. Students create, participate in, and reflect upon dance forms and styles from a range of cultures and traditions, both familiar and unfamiliar. IB Dance embraces a variety of dance traditions and dance cultures, both current and past, while also encouraging students to look towards the future through the lens of dance. Performance, creative and analytical skills are developed through the creation and performance of dance and through research and writing assignments. Students of IB dance will partake in physical technical training, dance history, composition and analysis of famous works. Participants in the course are expected to have taken Dance 1 and/or have equivalent dance training outside of SAS. Proof of dance training for the latter must be demonstrated in an audition/interview.

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

IB Theatre SL/HL Y1-Y2
Course Codes: HS6512 (SL Y3); HS6522 (HL Y2); HS6532 (HL Y1); HS6542 (HL Y2)
Duration: 2 years
Prerequisites: One year of drama or theatre is recommended.
Credits: 2.0
In the IB Theatre course students will explore theatre practices from Western and non-Western traditions and cultures. Students are encouraged to experience and participate in a wide and varied range of theatre activities, which include devising, performing, directing, observing and reflecting on a range of different theatre activities, which include devising, performing, directing, observing and reflecting on a range of different performance styles. Throughout the course students will develop academic skills appropriate for the study and understanding of theatre. They will also develop the confidence to explore and experiment – individually and collaboratively – on innovative projects that challenge established notions of theatre. Theatre is an ever-evolving art form, which reflects our ever-changing society. While year one of the course gives students a preparatory experience of the different assessment tasks, year two gives them the opportunity to choose more independently their focus for these tasks. By the completion of the course students will have created a collaborative theatre project, a director’s notebook, and will have presented a solo performance informed by a theatre theorist.

Introduction to Physical Computing
Course Code: HS7018
Duration: Year
Prerequisites: None
Credits: 1.0
Physical computing refers to the creation of devices that utilize electronics, mechanical components and computer logic to sense and respond to the surrounding world. This year-long course is designed around fun, hands-on activities and projects that challenge students to design, build and test solutions within specified design parameters. Students will develop essential 21st century skills, including authentic problem solving, rapid prototyping, adaptability and resilience. This multi-disciplined course allows students to learn to program, work with microcontrollers, use a range of Maker Space tools and techniques (including 3D printing and laser cutting) and implement Design Thinking, all in one subject! Students will not demonstrate their learning through exams, but rather through demonstrating competencies in the products they create and the processes they use to develop them. No previous experience is required or expected.

Introduction to Robotics
Course Code: HS8011
Duration: Year
Prerequisites: None
Credits: 1.0
Robots are becoming an increasingly impactful part of our world as automation changes the landscape of work and personal life. As we gain a better understanding of how robots function, and how they are made, is therefore becoming increasingly important. In this course students will work to design, build and test robots to perform a variety of tasks. As students engage in a variety of challenges that will be developing not only their designing, building and programming skills but also collaborative skills that are crucial to any future career path. Students will consider:
- How do electronics, mechanical engineering and programming work together to create solutions to real world situations?
- What are my unique skills and passions, and how might they contribute to a successful robot?
- How do we use a design process to develop the best solution we can make?
- How do we deal with and learn from different viewpoints, setbacks and challenges that we face as we develop a solution to a problem?

In addition to designing and creating robots students will also gain exposure to robotics in the real world by exploring current research, robotics in the news and robotics competitions.

Advanced Physical Computing
Course Code: HS7028
Duration: Year
Prerequisites: Intro to Physical Computing
Credits: 1.0
The Advanced Physical Computing course is designed for students that have either completed the SAS introductory course or displayed aptitude in the fields of electronics and computer science.

The aims of this course are:
- foster a passion for digital electronics and hardware design
- develop excellent Physical Computing skills and understanding of fundamental concepts
- develop a robust approach to Design Thinking
- be able to collaborate and communicate effectively in a range of scenarios

Students will learn to navigate the unique challenges presented by rapid prototyping, both individually and as part of a team. They will become very proficient in electronics, hardware design, 3D modelling and use a range of fabrication tools, including 3D printing and laser cutting.

In the first semester students will be working with Arduino (Uno R4 WiFi and Mega variants). In Semester 2 we will switch to the Raspberry Pi for introduction of machine learning and computer vision.

This course also leverages our community partners for AI and Inclusive Design units.

Web Design & Virtual Reality
Course Code: HS8009
Duration: Year
Prerequisites: None
Credits: 1.0
The Web Design course is designed for complete beginners with no previous background in computer science. The course is highly visual, dynamic, and interactive, making it engaging for new students.

In today’s world, web pages are the most common medium for sharing ideas and information. Learning to design websites is an incredibly useful skill for any career path. The Web Design course is a project-based course that teaches students how to build their own web pages. Students will learn the languages HTML, CSS & Bootstrap, and will create their own live homepages to serve as portfolios of their creations. By the end of this course, students will be able to explain how web pages are developed and viewed on the Internet, analyze and fix errors in existing websites, and create their very own multi page websites.

Students will learn the foundations of user interface design, rapid prototyping and user testing, and will work together to create professional, mobile responsive websites. Virtual Reality is added onto existing HTML skills to introduce students to the basics of building virtual reality worlds using HTML and the A-Frame JavaScript library. In this course, students will learn how to make virtual reality worlds with shapes, animation, and interactions in A-Frame. Students will be able to view and share their creations in a VR device.

Game Design and Development
Course Code: HS8010
Duration: Year
Prerequisites: None
Credits: 1.0
Digital Game Development is a year-long course designed for complete beginners with no previous background in computer science. The course is highly visual, dynamic and interactive, making it engaging for new coders.

This Game Development course is predominantly project-based, however students will concurrently develop their JavaScript programming skills via the excellent CodeHS web app. Students should expect to apply themselves in this aspect of the course, as a sound understanding of programming principles is essential in game development.

After we have iterated through a number of small game development tasks, students will then design and develop a complete 2D game using Construct 3 and JavaScript. Along the way, students will also get to play games, analyze them through a technical lens and understand the principles of good game design. We will also explore the gaming industry at large and the impact of video games on society.
PHYSICAL/HEALTH EDUCATION COURSES

Physical And Health Education Department Flow Chart

Grade 9 students will take:

Physical & Health Education 1

Grade 10 students will take:

Physical & Health Education 2

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

PE 3 – Personal Fitness
(semester course)

PE 3 – Swimming & Water Safety Instructor
(semester course)

PE 3 – Lifeguarding
(semester course)

Legend

SAS course

Physical & Health Education 1
Course Code: HS7000
Duration: Year
Prerequisites: None
Credits: 1.0

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

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

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

Physical & Health Education 2
Course Code: HS7001
Duration: Year
Prerequisites: Physical & Health Education 1
Credits: 1.0

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

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

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

PE 3 – Personal Fitness
Course Code: HS7002
Duration: Semester
Prerequisites: Physical & Health Education 2 or equivalent
Credits: 0.5

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

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

By: Mandy Wang
PE 3 – Swimming & Water Safety Instructor
Course Code: HS7006
Duration: Semester
Prerequisites: Physical & Health Education II or equivalent
The prerequisites for entry in the water safety instructor course are:
• Be at least 16 years of age by the last scheduled session of the instructor course;
• Demonstrate swimming skills by swimming the following strokes with good form: front crawl, back crawl, breaststroke, elementary backstroke, sidestroke, butterfly, back float 1 minute and tread water for 1 minute. If you are a little weak in your stroke there is time to improve your skills and technique.
Credits: 0.5
This course is designed for students who have completed the PHE graduation requirement and would like to continue to develop their knowledge and skills in swimming and swim instruction. On completion, students will be swimming and water safety instructors. To successfully complete the instructor course:
• Successfully complete all practice-teaching assignments.
• Pass preparatory quizzes and the final written exam.
Students must demonstrate that they are mature and responsible in and around the aquatic environment.

PE 3 – Lifeguarding
Course Code: HS7007
Duration: Semester
Prerequisites: Physical & Health Education II or equivalent
Physical & Health Education I & II or equivalent; be at least 15 years of age by the last scheduled session of the course; swim 500 yards continuously as follows: 200 yards front crawl using rhythmic breathing, 100 yards breaststroke and 200 yards of front crawl and/or breaststroke. Swim 20 yards using front crawl or breaststroke, surface dive to a depth of 7-10 feet, retrieve a 10 pounds/4.5 kg object, return to the surface and swim 20 yards back to the starting point with the object within a time of 1:40.00. If you are not swim fit at the start of the course you will have 3 weeks to complete the swimming prerequisite.
Credits: 0.5
The course teaches candidates the skills and knowledge needed to prevent drowning and injuries, and administer first aid, CPR/AED. The course requires a reasonably strong swimming ability equivalent to our middle or upper group levels in swimming in PE.
Students must demonstrate that they are mature and responsible. This course leads to certification for Lifeguarding, First Aid and CPR/AED, which is valid for 2 calendar years from the date of course completion.
To successfully complete the lifeguard course the student must:
• Participate in all activities, successfully perform the required skills, complete 6 skill scenarios, pass quizzes and pass written exams.
Students must also demonstrate that they are mature and responsible in and around the aquatic environment.

Dance 1-2
Course Codes: HS7010 and HS7071
Duration: 0.5 or 1 semester
Prerequisites: None
Credits: 0.5 credit or 1 year: 1 credit (Performing Arts elective or PE credit)
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. This course can be counted towards a PHE graduation requirement in exceptional circumstances and with prior approval.

IB Sports, Exercise, & Health Science SL/HL
(two-year course)
1 credit - Science
1 credit Elective
IB Computer Science HL
(two-year course)
IB Computer Science SL
(two-year course)
Theory of Knowledge
AP Research
AP Computer Science Principles: Gaming in Python
AP Computer Science Principles: Cybersecurity in Python
AP Computer Science A
IB Computer Science HL
(two-year course)
IB Computer Science SL
(two-year course)

By: Victoria Yu
Theory of Knowledge
Course Codes: HS8101 (Y1 – grade 11 students only), HS8102 (Y2 – grade 12 students only)
Duration: Year
Credits: 1.0
Theory of Knowledge (TOK) is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge. It is a required core course for the IB diploma and is also available for non-diploma students. The TOK course examines how we know what we claim to know. It does this by encouraging students to analyze knowledge claims and explore knowledge questions. The most central of these is "How do we know?", while other questions include: What counts as evidence for X?; How do we judge which is the best model of Y? and What does theory Z mean in the real world? Through discussions of these and other questions, students gain greater awareness of their personal and ideological assumptions, they develop an appreciation of the diversity and richness of cultural perspectives, and they reflect critically on diverse Ways of Knowing and on Areas of Knowledge.

Note that this course runs during the second semester of grade 11 and the first semester of grade 12. It is expected that students will take both semesters. The external IB assessments consist of a 1500-word essay & one oral presentation, and take place during the grade 12 semester.

AAP Research
Course Code: HS8400
Duration: Year
Prerequisites: AP Capstone Seminar
Credits: 1.0
AAP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year long mentored, research-based investigation to address a specific question. In this course, students further develop the skills acquired in the AP Seminar course by learning about and understanding research methods; employing ethical research practices, and accessing, analyzing, and synthesizing information as they address a research question. All students enrolled in an AP subject must sit the external exam at the end of the school year.

AP Computer Science A
Course Code: HS8201
Duration: Year
Prerequisites: Algebra II/Trigonometry
Credits: 1.0
The goals of an AP course in computer science are comparable to those in the introductory sequence of courses for computer science majors offered in college and university computer science departments.

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

AP Computer Science Principles: Gaming in Python
Course Code: HS8204
Duration: Year
Credits: 1.0
AP Computer Science Principles introduces students to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing changes the world. This rigorous course promotes deep learning of computational content, develops computational thinking skills, and engages students in the creative aspects of the field. The AP Computer Science Principles course teaches the concepts and computational thinking practices central to the discipline of computer science — and is organized around the investigation of seven topics, all of which are fundamental principles of computing and STEM (science, technology, engineering, mathematics) careers.

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

AP Computer Science A
Course Code: HS8201
Duration: Year
Prerequisites: Algebra II/Trigonometry
Credits: 1.0
The AP Computer Science Principles course teaches the concepts and computational thinking practices central to the discipline of computer science — and is organized around the investigation of seven topics, all of which are fundamental principles of computing and STEM (science, technology, engineering, mathematics) careers.

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

AP Computer Science Principles: Cybersecurity in Python
Course Code: HS8204
Duration: Year
Credits: 1.0
AP Computer Science Principles in Cybersecurity introduces students to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing changes the world. This Cybersecurity course promotes deep learning of computational content, develops computational thinking skills, and engages students in the fields of:

- Information Security
- Data Science
- Machine Learning
- Data Encryption
- Steganography/Data-hiding
- Image Filters
- Information Security
- Internet & Network Security Risk
- CyberEthics

The AP Computer Science Principles course teaches the concepts and computational thinking practices central to the discipline of computer science — and is organized around the investigation of seven topics, all of which are fundamental principles of computing and STEM (science, technology, engineering, mathematics) careers.

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

IB Computer Science SL/HL Y1-Y2
Course Codes: HS8115 (SL Y1); HS8125 (SL Y2); HS8135 (HL Y1); HS8145 (HL Y2)
Duration: Two years
Credits: 2.0
The IB computer science course helps students become aware of how computer scientists work and communicate with each other and with other stakeholders in the successful development and implementation of IT solutions. While the methodology used to solve problems in computer science may take a wide variety of forms, the group 4 computer science course emphasizes the need for both a theoretical and practical approach. Students acquire an understanding of the fundamental concepts of computational thinking and of how computers and other digital devices operate, and learn the skills necessary to create computer programs using the Java programming language. During the course the students will develop computational solutions. This will involve the ability to: identify a problem or unanswered question; design, prototype, and test a proposed solution liaise with clients to evaluate the success of the proposed solution; and make recommendations for future developments. Students are assessed internally through a software design and creation project and externally through a written exam.

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

IB Sports, Exercise, & Health Science SL Y1-Y2
Course Codes: 7030 (Y1), 7031 (Y2)
Prerequisites: Physical & Health Education II
Duration: Two years
Credits: 1.0 Science (Y1), 1.0 Elective (Y2)
This two-year course aims to introduce students to some of the scientific components that make up the study of sport, exercise, and health. The diploma program course in Sports, Exercise, and Health Science involves the study of the science that underpins physical performance and provides the opportunity to apply these principles.

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

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

*Course Code: HS8901*

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

*Credits: 0*

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

**English as an Additional Language (EAL)**

*Grade 9 Student may be placed into the following class:*

- **English 9: Sheltered Immersion EAL Course**

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

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

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

**EAL Support**

Students will have a certified EAL teacher available to support them during general supervised study hall.

**EAL Plus (EAL+) Support**

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

**Online Learning**

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

- **Global Online Academy**
- **Pamoja Education**
- **Virtual High School**

**Legend**

- Pamoja IB online courses
- VHS online courses

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

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

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

Why would an IB student take a course online?

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

**Courses offered by Pamoja:**

- IB Mandarin ab initio
- IB French ab initio
- IB Business & Management HL
- IB Business & Management SL
- IB Information Technology in a Global Society HL
- IB Information Technology in a Global Society SL
- IB Philosophy SL
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. Seats for GOA courses are limited. Mr. Mike McAvoy, Puxi HS GOA site coordinator, will make the final approval for all GOA course requests.

Students may view the catalog on the GOA website. (https://globalonlineacademy.org/)

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

SAS students may take a maximum of seven courses in any semester, which can include one VHS course per semester. The grade for the VHS course will appear on the student’s SAS report card and transcript and will be calculated as part of their grade point average. There is no additional cost for an approved SAS student to take a VHS course. Students who are interested in taking a VHS course should review all the relevant information on the Virtual High School site and should then meet with their guidance counselor to discuss the implications of taking a VHS course. Students who, after meeting with their counselor, would like to request to take an online VHS course should complete the VHS application form (available in the Counseling Office). The completed application should be submitted to the student’s counselor with their course selection form at the regular due date for course selections. Seats for VHS courses are limited. Mr. Mike McAvoy, Puxi HS VHS site coordinator, will make the final approval for all VHS course requests.

If you are interested in taking an online course, please review the VHS Course Catalog (https://www.vhslearning.org) 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.