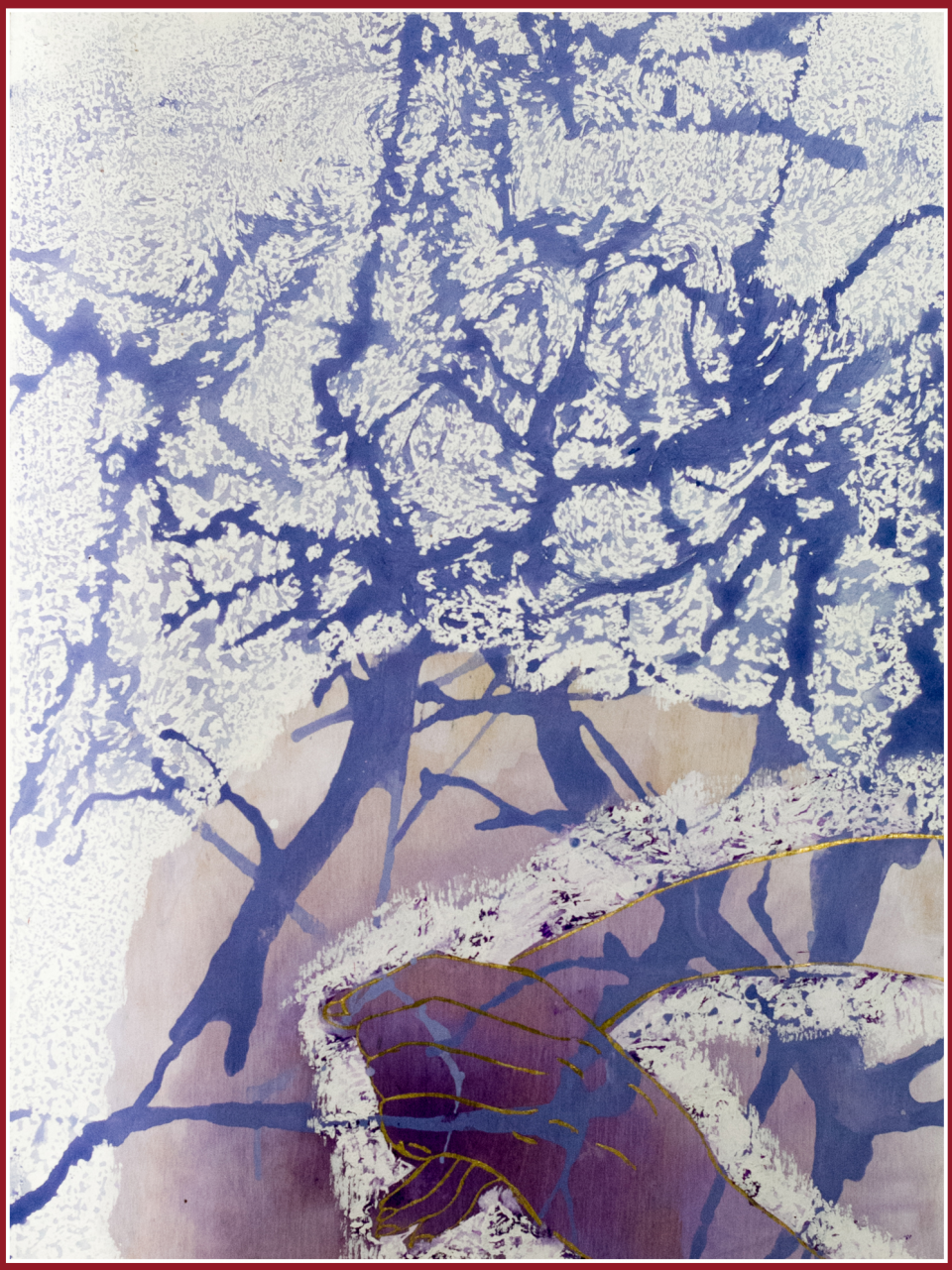
AMERICAN
INTERNATIONAL
SCHOOL
CHENNAI



High School Curriculum Guide

2018 - 2019

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Cover Art: Mahra Payne

MISSION

Together we inspire a love of learning, empowering all students with the courage, confidence, creativity and compassion to make their unique contribution in a diverse and dynamic world.

BELIEFS

We believe that…

- Each person has equal intrinsic value, worthy of dignity and respect.
- We are responsible for our choices and their effect on others, the environment and ourselves.
- Being open to new ideas and challenging experiences enriches our lives.
- Mutual respect, trust and caring foster healthy interpersonal relationships.
- Embracing our diversity makes us a stronger community.
- In an interconnected world, our positive contributions to the community and the environment are essential.
- Individuals thrive in a nurturing environment that provides for their physical and emotional safety.

VISION FOR AN AISC LEARNER

At AISC, successful learners are…

Leaders

We show courage by taking action and inspiring others to serve and contribute positively to our interconnected world. Leaders develop a vision, plan appropriately, and work collaboratively to achieve results.

Collaborators

We develop a deeper understanding by listening carefully to others' perspectives and confidently articulating personal viewpoints in the pursuit of common goals.

Innovators

We approach uncertainty with confidence, designing novel solutions in the face of challenges or change. Innovators are creative, resourceful, open-minded and resilient, seeking new perspectives through inquiry, trial, error and feedback.

Explorers

We investigate new interests with curiosity, inquiring with purpose, and seeking deeper understanding and fulfillment through their independent pursuits.

Thinkers

We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical, data-informed decisions.

Ethical

We show responsibility for our choices and consider their effects on ourselves, others, and the environment. We act on our principles and ideals because we value the dignity of others.

Versatile

We adapt to changing circumstances, balancing our commitments and showing courage as we take on new challenges. We seek new opportunities for learning, growth, and renewal.

Empathetic

We appreciate our own cultures and personal histories while respecting the values and traditions of others, believing each person has equal intrinsic value. We are sensitive to the needs of others and show compassion by making positive contributions to our local and global communities and the environment.

Resilient

We demonstrate ongoing commitment to our endeavors by learning from our successes and failures in the positive pursuit of our objectives, goals, aspirations, and dreams. We practice patience and persistence in all situations, especially when they are challenging or uncomfortable.

Reflective

We pause to think about our goals, learning, and growth in order to develop and sustain our creativity and lifelong learning. We review and examine our own ideas and experiences in relation to the world and consider our interdependence and impact on others.

ABOUT THE HIGH SCHOOL

The curriculum of the AISC High School has its foundations in the liberal arts approach to education, which offers students the opportunity to explore and learn in all of the academic disciplines. We seek to educate the whole child and

encourage participation in extracurricular activities such as team and individual sports, visual and performing arts and community service. Our students learn responsible citizenship by actively participating in the governance of the school.

In the High School, our goal is to assure that our students are well prepared for success in post-secondary education and beyond. We seek to do this by:

- Presenting a challenging program of instruction leading to an American high school diploma.
- Providing a learning environment in which students explore, question, evaluate, and analyze information and ideas through active participation and collaboration.
- Offering a balanced course of study in English language and literature, a second language, social studies, science, mathematics, fine and performing arts, design and information technology, physical education and health.
- Offering elective courses, online courses, personalized academic learning and extracurricular activities to allow students to pursue their interests.
- Encouraging students to develop an awareness and understanding of global issues and prepare for their roles as responsible global citizens.
- Ensuring that the school environment provides for the cognitive, emotional, social, aesthetic and physical development of our students.
- Offering the option of earning advanced standing in college through the International Baccalaureate Diploma program and/or Advanced Placement courses.

GRADUATION REQUIREMENTS

All high school students are required to pursue the AISC diploma which is earned by meeting the graduation requirements. The purpose in establishing these graduation requirements is to ensure that AISC students are well prepared for post-secondary education and to lead fulfilling, productive lives.

In order to receive a high school diploma from American International School Chennai, each student must earn a minimum number of credits while in grades 9 through 12. Students earn one-half credit for each semester of study that is successfully completed. To earn the high school diploma, these credits must be distributed among the subject areas as follows:

English	4 credits
World Language	2 credits*
Social Studies	3 credits
Science	3 credits
Mathematics	3 credits
Fine Arts	2 credits
Physical Education	1.5 credits
Health	0.5 credit
Elective Courses	5 credits
Discovery	0.25 credit/year at AISC
Total	25 credits

* World Language must be taken at AISC in either French or Spanish and two consecutive years of the same language must be completed to meet this graduation requirement.

In addition to the AISC high school diploma, students may earn an International Baccalaureate Diploma by meeting the requirements established by the International Baccalaureate Organization. Students may also earn AP Scholar recognition from the AP by taking a minimum number of AP tests and meeting score requirements established by the AP/College Board. Students interested in the IB Diploma and/or AP courses should talk with their counselor and/or the IB/AP Coordinator.

Discovery Credit

Students will reflect on their experiences throughout the year through the lens of the AISC Vision of a Learner. Active participation in Discover India, Discovery Days and in all Discovery Group activities is required to earn Discovery Credit. Time and support will be given by a faculty mentor during bi-monthly Discovery group assemblies.

Maximum Age

A student must complete the requirements for graduation before his or her 21st birthday.

Residence

A student who intends to graduate from AISC must be in attendance for the entire final academic year.

Exceptions

The Administration may, at its sole discretion, waive a particular graduation requirement in case of exceptional circumstances. Such circumstances may include but are not limited to the following:

- physical disabilities
- documented learning difficulties
- a required class not being offered during the student's year(s) of enrollment
- master-scheduling conflicts
- difficulty in meeting the requirements for graduation due to differences in the student's previous school program

Grade Placement

Students who enter AISC from another school will be placed in classes on the basis of official records from the previous school and placement assessments that may be given prior to admission at AISC. Students already attending AISC will be promoted to the next grade level as per their performance in AISC classes. The following guidelines will apply:

- A student will be placed in the 10th grade if s/he has completed one year of high school at an accredited institution and has earned a minimum of one credit each in English, social studies, science and mathematics.
- A student will be placed in the 11th grade if s/he has completed two years of high school at an accredited institution and has earned a minimum of two credits each in English, social studies, science and mathematics and one credit in physical education.
- A student will be placed in the 12th grade if s/he has completed three years of high school at an accredited institution and has earned a minimum of three credits in English, two credits each in social studies, science and mathematics and one credit each in world language and physical education.

Final decisions on grade placement and class standing will be made by the Principal.

Minimum Course Enrollment

Students in Grades 9 are required to enroll in a minimum of seven courses and Freshman Seminar in Fall semester and in a minimum of seven courses in Spring semester. Students in Grades 10, 11 and 12 must enroll in a minimum of seven courses each semester. Seniors who have an exceptionally difficult course load can appeal to the High School Principal to enroll in only six classes.

As a college preparatory English medium school, AISC expects all students to enroll in a minimum of five core academic courses each semester, including at least one credit of English. Students opting for online or academic personalized learning may do so only for elective credit and may not take more than two of such courses each semester.

Repeating Courses

Certain courses may be repeated for credit only if noted in the course description. Students will not be allowed to repeat other courses without the approval of the department chairperson, the Counselor and the Principal. In these cases, the transcript will reflect both grades.

Audit

On occasion, a student may audit a course, which means that s/he attends the class as a regular student but receives no credit.

Schedule Changes

Students will have an opportunity to make schedule changes at various times in the year. Kindly refer to the student handbook for details.

TYPICAL COLLEGE ENTRANCE REQUIREMENTS

It is important for students to begin their college planning early in their high school career. Since each college establishes its own particular requirements, it is important to follow the suggestions given in the catalogs of the colleges being considered. The school counselor is available to assist students in planning their college preparatory programs.

Subject	AISC Graduation Requirements	Recommendation of Selective Colleges
English	4 years	4 years
Social Studies	3 years	4 years
Math	3 Years	4 years
Science	3 years	4 years
World Language	2 Years (same language)	4 years
Fine Arts	2 Years	2 years (more if specializing in arts)

Selective colleges expect capable students to go beyond the minimum requirements and take challenging courses commensurate with their abilities and interests. Colleges also consider a student's involvement in extracurricular activities and other electives such as athletics, fine arts, student government and community service when making admissions decisions.

DISCOVER INDIA

Each year the High School augments the learning experiences on campus by offering our students an opportunity to explore India to high school students. Each year small groups of students and faculty members travel to various locations in India to explore different facets of Indian culture and geography. We believe that such a program provides our students with unique cultural, personal, interpersonal, and environmental experiences not available on the AISC campus, and from which our students will learn, reflect and grow as individuals.

Our Discover India goals are fivefold:

- Provide exposure to India in order to nurture a better understanding and appreciation of Indian culture, geography, and people.
- Strengthen the bonds of community among our high school students and the faculty, as well as foster the development of responsibilities commensurate with group living.
- Foster attitudes of responsible global citizenship by involving students in environmental stewardship and service learning projects throughout India.
- Provide students and faculty members with opportunities for reflection, creative expression, self awareness, and self-reliance.
- Provide students and faculty members with opportunities to develop new interests and aspirations.

These experiences take place early in the school year to encourage the development of positive relationships among new and returning students. We provide a range of experiences in attempt to meet a wide range of interests. Attendance on a Discover India trip is mandatory. Days missed from Discover India will count as regular Day 1 or Day 2 absences. More information about Discover India can be found on the High School Learning Portal page.

EXTERNAL EXAMINATION PROGRAMS

IB DIPLOMA PROGRAM

The International Baccalaureate Diploma Program (IBDP) is a pre-university course of study designed for students in their last two years of secondary school.

The IB Diploma curriculum can be administered in any country and is recognized by universities worldwide. Most colleges and universities in the United States, as well as colleges and universities in more than 60 countries have an IB recognition policy granting incoming students credit or advanced standing on the basis of their IB results.

IB Mission Statement

"The International Baccalaureate Organization aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the IBO works with schools, governments and international organizations to develop challenging programs of international education and rigorous assessment. These programs encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right."

IB Learner Profile

The attributes of the learner profile express the values inherent to the IB continuum of international education: these are values that should infuse all elements of the IBDP and, therefore, the culture and ethos of all IB World Schools. IB programs promote the education of the whole person, emphasizing intellectual, personal, emotional and social growth through all domains of knowledge.

IB Learners strive to be:
Inquirers, Knowledgeable, Thinkers, Communicators, Principled, Open-minded, Caring, Risk-takers, Balanced and Reflective

IB Diploma Requirements
IB Diploma Program students must choose six courses to take--one subject from each of five Groups: Group 1-Studies in Language and Literature (English); Group 2-Acquired Language (World Language); Group 3-Individuals and Societies (Social Studies), Group 4-Sciences; and Group 5-Mathematics. Students may choose either a Group 6: the Arts (visual arts or theater), or a second subject from Groups 1 through 5 for their sixth course.

At least three and not more than four subjects are taken at higher level, while the other subjects are taken at standard level. The distinction between SL and HL classes lies in the depth and breadth of the syllabus coverage, the assessment details, the assessment criteria and the workload. Higher level subjects are typically extensions of the standard level subjects, with topics explored in greater depth and/or more topics explored. However, the rigor of the assessments is generally the same.

In all IB subjects, students are assessed both internally by the teacher using IB guidelines and criteria and externally by outside examiners. External assessment may be in the form of an essay or an examination. Internal assessments may be in the form of an essay, a project, and oral presentation or examination, a recital or an exhibition.

In addition to disciplinary and interdisciplinary study, the Diploma Program features three **core elements** that broaden students' educational experience and challenge them to apply their knowledge and skills: the **Extended Essay**, **Theory of Knowledge and Creativity**, **Activity and Service.**

The **Extended Essay (EE)** of some 4,000 words offers the opportunity for IB students to investigate a topic of special interest, usually in one of the student's six DP subjects, and immerses them in the independent research and writing skills expected at university. It is intended to promote high-level research and writing skills, intellectual discovery and creativity - resulting in approximately 40 hours of work. It provides students with an opportunity to engage in personal research on a topic of their choice, under the guidance of an AISC supervisor. This leads to a major piece of formally presented, structured writing of no more than 4,000 words, in which ideas and findings are communicated in a reasoned and coherent manner, appropriate to the subject. 2017 graduates follow the completion of the written essay with a short, concluding interview - *viva voce* - with the supervisor. For graduates in 2018 and beyond, EE students will complete periodic reflections on their research and writing process, in addition to the viva voce. In countries

where normally interviews are required prior to acceptance for employment or for a place at university, the extended essay had proved to be a valuable stimulus for discussion.

The interdisciplinary **Theory of Knowledge (TOK)** course is designed to develop a coherent approach to learning, knowledge and understanding that transcends and unifies the academic areas and encourages appreciation of other cultural perspectives. The theory of knowledge course is in part intended to encourage students to reflect on the huge cultural shifts worldwide around the digital revolution and the information economy. The extent and impact of the changes vary greatly in different parts of the world, but everywhere their implications for knowledge are profound. Theory of knowledge encourages critical thinking about knowledge itself and aims to help young people make sense of that they encounter. Its core content focuses on questions such as the following:

- What counts as knowledge?
- How does it grow?
- What are its limits?
- Who owns knowledge?
- What is the value of knowledge?
- What are the implications of having, or not having, knowledge?

TOK activities and discussions aim to help students discover and express their views on knowledge issues. The course encourages students to share ideas with others and to listen and learn from what others think. In this process students' thinking and their understanding of knowledge as a human construction are shaped, enriched and deepened. Connections may be made between knowledge encountered in different Diploma Program subjects, in CAS experience or in extended essay research; distinctions between different kinds of knowledge may be clarified.

Creativity, Activity, Service (CAS) is at the heart of the Diploma Program, involving students in a range of activities that take place alongside their academic studies throughout the IB Diploma Program. The component's three strands, often interwoven with particular activities, are characterized as follows:

- Creativity - arts and other experiences that involve creative thinking
- Activity - physical exertion contributing to a healthy lifestyle, complementing academic work elsewhere in the IB Diploma Program
- Service - an unpaid and voluntary exchange that has a learning benefit for the student.

Creativity, activity, service encourages students to be involved in activities as individuals and as part of a team that take place in local, national and international contexts. Creativity, activity, service enables students to enhance their

personal and interpersonal development as well as their social and civic development, through experiential learning, lending an important counterbalance to the academic pressures of the rest of the IB Diploma Program. It should be both challenging and enjoyable - a personal journey of self-discovery that recognizes each student's individual starting point.

Activities should provide:

- real, purposeful activities, with significant outcomes
- personal challenge - tasks must extend the student and be achievable in scope
- thoughtful consideration, such as planning, reviewing progress and reporting reflection on outcomes and personal learning.

The IB Diploma at AISC

AISC practices a policy of open enrollment in the IB diploma program. Any student in grade 11 or 12 is allowed to enroll in the IB Diploma Program, provided s/he has successfully completed the prerequisite courses with a minimum grade requirement.

Students in grades 10-12 may also enroll in individual IB courses if they meet the necessary prerequisites. However, students in grade 10 cannot apply these courses to an IB Diploma Program. Only courses taken in the last two years of high school will apply to the IB Diploma requirements. Students must attend IB classes in order to take the examinations.

It is essential that students and their parents clearly understand the differences between the course selections that lead to the AISC diploma and those that lead to the IB Diploma in order to best meet the needs of the individual student. Students wishing to pursue the International Baccalaureate Diploma must coordinate their academic plans with the IB coordinator and the counselor to ensure that additional requirements for the diploma can be met in a timely fashion.

For further information regarding the IB Diploma program, please contact the IB Coordinator (mailto:ibapcoordinator@aischennai.org) or refer to the high school website (www.aischennai.org). Additional information can also be obtained at the official IBO website (http://www.ibo.org).

IB Course Offerings at AISC

Group 1: Studies in Language & Literature

English A Language and Literature SL & HL
School supported self-taught language A*

Group 2: Language Acquisition
French ab initio SL
French B HL & SL
Spanish ab initio SL
Spanish B HL & SL

Group 3: Individuals & Society
Economics HL & SL
Psychology HL & SL

Group 4: Experimental Sciences
Biology HL & SL
Chemistry HL & SL
Physics HL & SL
Computer Science SL

Group 5: Mathematics
Mathematics HL & SL

Group 6: The Arts
Visual Arts HL & SL
Theatre HL & SL

The Core
Extended Essay, Theory of Knowledge and Creativity, Activity, Service

Notes: Language A – a language course in the first language.

*School supported self-taught Language A – A self-taught language is one for which the student studies her/his native language (other than English) with some support from AISC. Self-taught language students work with an IB trained tutor, provided by the family, to move through the IB Language A SL curriculum. AISC provides necessary support to register the student and provide for and upload all assessments, but does not assume any teaching or tutoring responsibility. A school-supported, self-taught language meets the requirements for either Group 1 or Group 2. Students completing English A and a school-supported self-taught language A will receive a bilingual IB diploma.

Language ab initio – a language course for students with little (none in high school) or no prior experience in the language.

Language B – a language course for students with 2-5 years of prior experience in the language.

ADVANCED PLACEMENT PROGRAM

The Advanced Placement Program (AP), administered by the College Board (US) is a collaborative effort between motivated students, dedicated teachers and committed high schools, colleges, and universities. The AP is designed to offer high school students a course experience equivalent to an introductory university level course. Since its inception in 1955, this program has enabled millions of students to take college-level courses and exams, and to earn college credit or placement while still in high school.

A committee of college faculty and master AP teachers designs each AP course to cover the information, skills, and assignments found in the corresponding college course.

More information about the AP Program is available at AP Central, the College Board's online home (apcentral.collegeboard.com). Students can find more information at the AP student site (https://apstudent.collegeboard.org/home).

AP Exams

Each one-year AP course has a corresponding exam that participating schools worldwide administer in May. AP exams contain multiple-choice questions and a free-response section (either essay or problem solving).

Because the College Board is committed to providing access to AP Exams for home-schooled students and students whose schools do not offer AP courses, it does not require students to take an AP course prior to taking an AP Exam.

AISC offers 12 or 14 AP courses depending on the year's rotation.

AP Course Offerings at AISC

- English Language and Composition
- Spanish Language and Culture *
- French Language and Culture*
- Economics (Micro and Macro)
- Human Geography (alternating years)
- Psychology (alternating years)
- Biology (alternating years)
- Chemistry (alternating years)
- Environmental Science (alternating years)
- Physics 1
- Physics C (Mechanics) (alternating years)

- Calculus AB
- Calculus BC
- Statistics
- Computer Science A

Students can earn College Board recognition including AP Scholar, AP Scholar with Honors, AP Scholar with Distinction and AP International Scholar by earning scores of 3 or higher on three, four or five or more total AP Exams, based on the exam criteria requirements listed at the College Board's AP Scholar Awards page.

GUIDELINES FOR STUDENTS IN IB AND AP CLASSES

IB and AP courses are designed to be demanding, college-level courses. Students who are interested in taking advantage of the IB or AP programs being offered at AISC should review the following guidelines to assist them in the decision-making process.

- Students must meet the prescribed prerequisites in order to ensure that s/he possesses the appropriate skills to meet the demands of the course. Generally the student must have at least a "B-" grade in prerequisite courses.

- A recommendation from a high school teacher in a previous course in the subject may be necessary for some IB or AP courses a student would like to take.

- It is important for a student to have well-developed reading, writing and critical thinking skills in order to be successful in IB and AP courses.

- Learning habits: Self-motivation and a mature approach to learning are key components of success in IB and AP courses. Students need to be able to manage their time effectively, collaborate on challenging activities and should show a willingness to seek assistance from peers and teachers when necessary.

- Colleges and universities expect to receive results from IB or AP examinations taken by students as they have indicated on their transcript that they are pursuing advanced coursework. Thus, students enrolling in an AP or IB course must take the external exam in May. If a student does not meet requirements for effort and thus achievement, and/or does not prepare for and give full effort on their AP or IB assessments, they will not earn AP or IB designation on their transcript.

- To maintain a proper balance between school work and outside activities, students will be limited to taking no more than three IB Higher Level or three AP courses per year. Students who wish to take more than this number of IB HL or AP courses must complete an Academic Waiver form.

Fees for the IB or AP examinations are charged in addition to tuition and other school fees. Parents will be notified of these fees well in advance of the examinations. These fees must be paid to the school before the student will be allowed to take the exams.

COURSE DESCRIPTIONS

The purpose of this Guide is to acquaint students with the courses at AISC and to enable them to wisely plan an individualized program that also incorporates specific requirements.

The following pages contain descriptions of courses offered in Grades 9 -12. Before selecting a course, students should learn as much about it as they can---objectives, requirements, prerequisites (if any), credits, etc. Students should use this Guide to help answer these important questions while determining their four-year plan.

- Are the courses I am choosing appropriate to my abilities, interests and career interests?
- Will I meet the credit requirements for graduation by the end of my senior year?
- Will the courses I am taking help me to meet the entrance requirements for the specific colleges and universities I wish to attend?
- Is my program for the next year appropriately challenging for *me*?
- Have I chosen a course of study that will allow me to balance my time between classes and extracurricular activities?

Students are encouraged to discuss any questions they might have about these courses with their teachers.

While every attempt will be made to offer all the courses listed in the Curriculum Guide, please note that courses with insufficient enrollment may not be offered or may be offered concurrently with another course.

Due to the nature of the IB Diploma Program requirements it may be necessary to prioritize the scheduling of IB diploma candidates for IB classes.

ENGLISH

The English Department at AISC is dedicated to providing a program that emphasizes inquiry, creativity, reflection and analysis. We encourage students to interpret literature based on their own detailed analysis of texts and their understanding of human nature, and to defend their interpretations with confidence. To achieve this goal, we:

- encourage students to engage with literature using compassion and thoughtfulness
- develop a spirit of inquiry to enhance students' critical thinking skills
- promote creative expression
- deepen students' awareness of the credibility and usefulness of sources
- encourage the continuous development of written and oral expression

Our hope is that the English courses allow students to become compassionate global citizens with the courage and creativity to express themselves with confidence.

The English curriculum focuses on the areas of reading, writing, speaking, and listening. Each area will be assessed in every course in various ways, and skills will be revisited and refined over the course of the four-year program.

All students must take an English class for every semester they attend AISC, earning a total of four English credits. Freshmen must take Critical Thinking in Reading and Writing 1 while sophomores must take Critical Thinking in Reading and Writing 2. Upperclassmen may choose to take any of the following courses their junior and senior years: AP Language and Composition (a year-long course), IB English Language and Literature (a two-year-long course), or Public Speaking, Expository Writing, Dystopian Literature, Introduction to Poetry, and Introduction to Literature and Film (all semester-long courses).

Critical Thinking in Reading and Writing 1

Prerequisite	*Successful completion of English 8, or the equivalent*
Duration	*1 year*
Units of Credit	*1*

Critical Thinking in Reading and Writing 1 provides a foundation for students to expand their critical thinking in a variety of reading, writing and speaking opportunities. One primary goal is for students to recognize, describe, and then evaluate how a writer's choices of language, style, and form work together as a way to communicate purposefully to a specific audience. Another primary goal is for students to successfully produce cohesive and well-organized texts reflecting their own strong choices related to language, style and form. Students will study

and respond to literature, both fiction and nonfiction, as well as visual texts. Using these, students will become more skilled at literary analysis, understanding multiple perspectives, and constructing arguments, all necessary to become articulate, internationally-minded critical thinkers in the higher level English classes. The Critical Thinking in Reading and Writing 1 curriculum is based on the English Language Arts Core Curriculum Content Standards. Students will consistently expand skill and content understanding through formative learning activities, while their progress will be measured through appropriate summative assessments in a variety of forms, including discussions, oral presentations, and writing, including a major multi-sourced research argument.

Critical Thinking in Reading and Writing 2

Prerequisite	*Successful completion of Critical Thinking in Reading and Writing 1, or the equivalent*
Duration	*1 year*
Units of Credit	*1*

The Critical Thinking in Reading and Writing 2 course is a literature based, integrated language arts program that provides continued opportunities to develop analytical skills involved in writing and speaking. Participants also will develop an understanding of the techniques involved in literary criticism, furthering their ability to recognize, describe, and then evaluate how a writer's choices of language, style, and form communicate purposefully to a specific audience. Additionally, students continue to work towards successfully producing texts reflecting their own choices related to language, style and form. Through the comparative analysis of literature from various times and cultures, students develop an appreciation for multiple perspectives and a deeper respect for literary traditions. This course focuses on the fundamentals of detailed study and independent interpretation of text, exposing students to a broad range of writing styles and other literary mediums. The course content and learning opportunities prepare students for the rigorous options offered to upperclassmen. The Critical Thinking in Reading and Writing 2 curriculum is based on the English Language Arts Core Curriculum Content Standards. Students will consistently expand skill and content understanding through formative learning activities, while their progress will be measured through appropriate summative assessments in a variety of forms, including discussions, oral presentations, and writing.

AP Language and Composition

Prerequisite	*Successful completion of Critical Thinking in Reading and Writing 2*
Duration	*1 year*
Units of Credit	*1*

The AP Language and Composition course is structured so that all students "become skilled readers of prose written in a variety of rhetorical contexts and skilled writers who compose for a variety of purposes" (*College Board,* "AP English Course Description", 2014, p. 2). The course is organized according to the requirements and guidelines of the *2015 AP English Course Description*. Students will comprehend, analyze and synthesize a wide variety of historical, journalistic, artistic, photographic, economic, and scientific texts. Formative learning activities will strengthen students' critical thinking, cultural understandings, and understanding and identification of rhetorical strategies, while summative assessments will measure the key skills to read analytically; write successful arguments, expositions, and analyses; create multi-stage drafts, and strengthen teacher writing skills with feedback. Released AP essay prompts and multiple choice questions will be a foundation in both formative and summative assessments. At the end of this course all students will be prepared and required to take the exam in AP Language and Composition.

IB English A1 Language & Literature HL/SL

Prerequisite	*Successful completion of Critical Thinking in Reading and Writing 2 with a grade of B – or better and teacher approval*
Duration	*2 years*
Units of Credit	*2*

This course is intended to provide Grade 11 and Grade 12 students a challenging course which will prepare them for further academic studies and growth beyond academia. IB Language and Literature SL and HL is designed to support student creation of comprehensive and sophisticated answers to the questions, What is literature? What is language? What is culture? How and where do these concepts intersect? By expanding their reading comprehension and analysis skills as well as their writing, viewing and speaking skills, students will meet four assessment objectives: knowledge & understanding; application & analysis; synthesis & evaluation; and selection and use of appropriate presentation and language skills. The IB Program considers this a "Group 1" course, designed for students who, because they speak English outside of school, desire mastery of the language, and skill in analysis of text and image. Higher (HL) and Standard (SL) levels are distinguished by the number of texts read, the number of written tasks completed, and both the depth and the number of skills in which one must demonstrate proficiency. The course's broad scope will allow the study of a wide range of genres from a variety of time periods and regions, including both traditional and nontraditional forms of texts. *At the end of this course students will be prepared and required to take the exam in IB English A Language and Literature at Standard level or Higher level.*

Public Speaking

Prerequisite	*Successful completion of Critical Thinking, Reading and Writing 2 or the equivalent*
Duration	*1 semester*
Units of Credit	*0.5*

This course is designed to refine students' speaking skills by providing diverse speaking opportunities throughout the semester. Students will participate in speaking activities that prepare them to speak in public and small group settings. Emphasis is on research, preparation, delivery and evaluation of informative and argumentative speech, debate, and other formats of speech. Students will be expected to deliver well-prepared speeches with appropriate supporting audio-visual materials and to adapt their speeches to a range of possible audiences, preparing them to speak in college, the workplace, and social settings.

Expository Writing

Prerequisite	*Successful completion of Critical Thinking, Reading and Writing 2 or the equivalent*
Duration	*1 semester*
Units of Credit	*0.5*

This course is designed to introduce students to various forms of composition and expository writing. Students will learn about argument formation and various writing techniques. The course objective is to further prepare students for the expectations of writing they will face in college and in their professional lives. Writing instruction focuses on three primary activities: reading books and articles, making connections between multiple sources, and designing an independent thesis based on these connections in order to respond to the ideas of others. This course is not intended for students who have taken AP Language and Composition.

Dystopian Literature

Prerequisite	*Successful completion of Critical Thinking, Reading and Writing 2 or the equivalent*
Duration	*1 semester*
Units of Credit	*0.5*

The Dystopian Literature course challenges ideas of human progress, technological advances, and the individual's place in society through the lens of dystopian literature, while developing in students the skills needed to be thoughtful critical readers. Among these skills are developing questions, finding and evaluating evidence, and communicating claims. The Dystopian literature curriculum is based on the English Language Arts Core Curriculum Content Standards. The works studied are drawn from novels, plays, short stories, and film in order to explore and compare the challenges and opportunities each genre presents to the artist

developing a dystopia. The works are also chosen from a variety of dystopia types in order to refine an understanding of the possibilities within the genre. The learning activities encourage students to construct their own understanding about literature and human nature, as well as develop well-articulated and reasoned justifications for the conclusions they reach. Students consistently expand skills and content understanding through formative learning activities, while their progress is measured through appropriate summative assessments in a variety of forms, including student-led discussions, oral presentations, and writing.

Introduction to Literature and Film

Prerequisite	*Successful completion of Critical Thinking, Reading and Writing 2 or the equivalent*
Duration	*1 semester*
Units of Credit	*0.5*

The purpose of the Introduction to Literature and Film course is to provide students with the tools to appreciate the elements involved in adapting literary texts to film. To do this, the course will examine several novels and films so that students can form general conclusions and compare the works studied. Close analysis of literary and film texts will allow students to fine-tune their understanding of the artistic and sometimes even political choices behind artistic choices, and students will consider how those choices impact thematic and dramatic purposes. Students will explore the ways literature can provoke the audience to reflect on, and question, themselves and the world. The aim will be to understand how the various techniques available to writers and filmmakers enable them to produce works with the power to move and please an audience, as well as stimulate thought. Students' growth and improvement will be measured against the Core Content Curriculum Standards in the areas of reading, writing, speaking and listening.

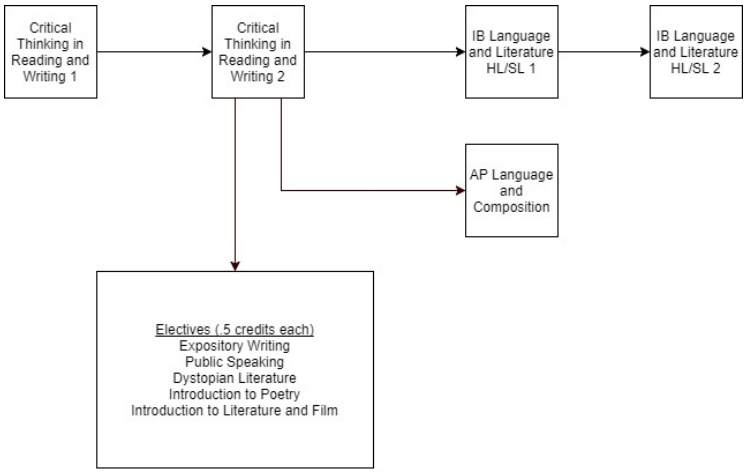
Introduction to Poetry

Prerequisite	*Successful completion of Critical Thinking, Reading and Writing 2 or the equivalent*
Duration	*1 semester*
Units of Credit	*0.5*

The Introduction to Poetry course provides students with the basic tools to appreciate the complexity and joy of poetry, while developing in them the skills to read critically and write creatively. To do this, the students examine poems from various genres, historical periods and global traditions, ranging from sonnets to ballads, the Renaissance to the present, and from Western and non-Western traditions. Close study of texts allows students to fine-tune their understanding of the artistic and sometimes even political choices behind allusions, diction, rhythm, and figurative language. In addition to understanding poems artistically, students

consider them politically, socially and culturally. Students explore the ways literature can reflect or even impact the values of a society. The aim is to understand how the various techniques available to poets enable them to produce works with the power to move an audience and provoke thought. To construct a deeper understanding of poetry, students try their hands at creating their own poems using some of the more challenging forms, such as sonnets and ballads. The Introduction to Poetry curriculum is based on the English Language Arts Core Curriculum Content Standards, and formative learning activities engage the students in constructing their own understanding of the concepts while perfecting their communication and critical thinking skills. Their progress is measured through appropriate summative assessments in a variety of forms, including student-led discussions, oral presentations, poetry annotations and writing explications of unseen poems.

Course Sequence Map



English as an Additional Language (EAL)

The American International School Chennai is proud to host a large population of students from different countries, cultures and language backgrounds. A significant number of students at the school speak a language other than English at home. The professionals in the English as an Additional Language (EAL) Department support English language acquisition.

The EAL Department is committed to excellence in delivering inclusive services to all English Language Learners. EAL teachers provide support to differentiate instruction based on student needs, so that students are able to demonstrate mastery of content despite limited English language proficiency. Our goal is to support student development in English for academic and social success while encouraging the continued growth of the home language and maintaining cultural

identity. We value all students as members of our diverse, multilingual learning community.

In addition, English for Academic Purposes (EAP) classes are offered. Eligible students have the option of taking EAP classes in lieu of French and Spanish courses. Upon admission to the school, non-native speakers are administered the World Class Instructional Design and Assessment (WIDA) test in order to assess and monitor English language development. Students are advised to enroll in EAP coursework dependent on their score on the WIDA test.

EAL Admissions Procedures

In order to ensure their success in a demanding academic environment, EAL students are accepted in grade 9 through 12 depending on their level of academic English and their academic school records. Grades 9 and 10 applicants should demonstrate English language proficiency at the intermediate level or above in order to be considered for admission. In order for the students to be adequately prepared for the academic rigor of the 11th and 12th grades, students should be independent of EAL support before entering the 11th grade.

The school will take into consideration a range of criteria to determine appropriate placement for an applicant in Grades 9 to 12, including the following:

- the application;
- school records (transcripts and/or report cards);
- letters of recommendation;
- personal interview with parents/students;
- English language proficiency assessment.

The English language proficiency assessment is generally administered at AISC. In case an applicant cannot come to AISC, a standardized test and/or interview may be sent to the student's present school or may be conducted online.

English for Academic Purposes (EAP)

Prerequisite	*EAL department recommendation*
Duration	*1 year*
Units of Credit	*1*

The secondary English for Academic Purposes (EAP) courses are designed to give students a comprehensive introduction to a range of academic texts and discourses used across the school curriculum.

The EAP curriculum aims to develop in students an understanding of how language is used to make meaning, as well as how content is organized in different text types across the school curriculum including text structures, language features, and vocabulary depending on purpose and audience. It acknowledges that students' home languages and cultures are resources for students to draw upon in order to build proficiency in English. The EAP class develops the skill for the students to contribute actively to class and group discussions. In each unit, it will be emphasized that language is used in meaningful and relevant ways.

Students will practice and develop both their receptive (listening and reading) and productive (speaking and writing) skills within each text type with learning experiences derived from the **Grade 6-10 California English Language Development Standards**. Summative assessments will be standards based and reflect students' ability to produce the appropriate oral discourses and written texts types.

Note: Students enrolled in EAP will receive a Pass/Fail grade for English, Social Studies and Science courses.

World Languages

The World Languages program at AISC strives to inspire a love for language learning, enabling students to communicate with confidence in the target language and to develop a foundation for intercultural awareness that will foster international understanding. Linguistic proficiency is essential for successful interactions in an increasingly connected world, and therefore is at the core of our curriculum.

The World Languages program is a grade 3 to 12 academic program, which ultimately leads to a high level of proficiency in the language. It is a consistent program, enabling the continuous study of French or Spanish, each year building upon and expanding previous knowledge and skills.

The AISC World Language Department believes that both language educators and their students should use the target language to communicate in the classroom, ideally 90% of the time at all levels of language courses.

French 1

Prerequisite	*No previous language experience required*
Duration	*1 year*
Units of Credit	*1*

In the French Level 1 course, students develop basic oral and written communication skills in simple daily situations. Reading, writing, speaking, and listening skills are developed through activities such as role-play, interviews, written projects and presentations. French is the language of instruction and communication in this class. The units covered are: Greetings and Introductions, At School, My Family, My Town, My Leisure Activities. Various cultural aspects of Francophone countries are covered within the units of study. Meeting the learning standards is based on written and oral summative assessments that address foundational skills (grammar and vocabulary), productive (speaking and writing) and receptive (reading and listening) skills. This course is offered to beginners in the language as well as to students with some prior experience in the language who need more time to develop Level 1 skills.

French 2

Prerequisite	*Completion of HS French 1, or the equivalent.*
Duration	*1 year*
Units of Credit	*1*

In the French level 2 courses, students begin to move towards some independence, especially in their productive (oral and written) communication. Students will improve productive skills through the continued use of receptive (reading and listening) activities with an emphasis on use in context. French is predominantly the language of instruction and communication in this class. The themes covered this year are: Food, health, technology, activities in town, and jobs. Speaking activities focus on simulating real use and help connect with varied other skills. Students explore new aspects of the target culture and make connections with different areas of their studies. Evaluation is based on summative assignments on students' productive and receptive abilities.

French 3

Prerequisite	*Completion of HS French 2, or the equivalent*
Duration	*1 year*
Units of Credit	*1*

In the French level 3 course, students become more independent in their productive communication and receptive understandings. They improve their productive skills (oral and written) and their receptive (reading and listening) skills through varied activities with an emphasis on use in context. French is the main language of instruction and communication in this class. Each student is given the opportunity to use the language in meaningful ways in order to expand upon the four communicative skills. The course aims to further develop the students' understanding

of French culture in French-speaking countries. Students expand their understanding of cultural perspectives and continue to make connections with other areas of their studies and life. We complete grammar acquisitions by learning all complex tenses. The themes this year are: In town, the future, green spaces, and the arts. Evaluation is based on summative assignments on students' productive (speaking and writing) and receptive (reading and listening) abilities with a growing number of IB-level tasks. This course is required for entry into HS French AP Language and Culture and HS French IB Language B courses.

IB French *ab initio*

Prerequisite	*No previous experience in the language is required, all students must be IB Diploma candidates*
Duration	*2 years*
Units of Credit	*2*

In IB French ab initio, students explore French language and learn to develop their intercultural understanding. They will be able to interact appropriately in a defined range of everyday situations by developing their receptive, productive and interactive skills. The curriculum is based on the IB Group 2 objectives. Vocabulary and grammar are introduced in context. To meet the course requirements, students engage in a variety of activities that require them to use the language for authentic purposes, as well as to read and understand different types of texts. Further, they are exposed to various cultural aspects of French-speaking countries. This should enable them to make comparisons between the target language and their own and also make connections with other subjects. This course covers the following themes: Identities, Experiences, Human ingenuity, Social organization and Sharing the Planet. French is the language of instruction and communication in this class. Evaluation is based on summative assessments of the students' productive (speaking and writing) and receptive (reading and listening) skills based on the IB objectives. This two-year course is offered to students in grade 11 and 12 with little or no previous exposure to French. At the end of this course students will be prepared and required to take the IB French *ab Initio* exam.

IB French Language B SL/HL

Prerequisite	*Successful completion of French 3*
Duration	*2 years*
Units of Credit	*2*

IB French B1 course builds on the communicative and cultural skills developed in level 3. In this course, students will learn to express themselves in a wide range of contexts with growing depth and accuracy. They will go through interviews and

interactive activities in class. They will write structured essays of 250-400 words and they will respond to a variety of articles that will test their comprehension skills. They will discuss a range of social, economic, and cultural facts of the French-speaking world and will be able to draw connections with other topics. With the new IB curriculum, we are exploring the themes of Identities, Experiences, Human ingenuity, Social organization and Sharing the Planet. All interactions in class must take place in French. Our standards are the IBO language B objectives and we follow the IB assessment criteria.

The second year further develop the students' receptive and productive skills and specifically prepares them to the format and timing of their IB exams. They complete their internal assessments by mid-March and practice with past IB papers. In May 2020 exams, students will also complete a listening comprehension test as part of their final exam.

Students wishing to pursue the Higher level will further study two original works of literature. At the end of this course students will be prepared and required to take the IB French Language B SL or HL exam.

AP French Language and Culture

Prerequisite	*Successful completion of French B SL Year 1, or completion of level 3 with a grade of B or better and teacher recommendation*
Duration	*1 year*
Units of Credit	*1*

The AP French Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP French Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in French. The AP French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music , laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). The curriculum is based on the AP objectives and cover the prescribed themes: science and technology, personal and public Identities, families and communities, global challenges, contemporary life, and beauty and aesthetics. Assessments is based on the objectives . Evaluation is based on summative assessments of the students' productive (speaking and writing) and receptive (reading and listening) skills based on the AP objectives. This is an

accelerated one-year course offered to students in grade 11 or 12 who have studied French for four or more years and who have a strong interest in the language. At the end of this course students will be prepared and required to take the AP French Language and Culture exam.

Spanish 1

Prerequisite	*No previous language experience required*
Duration	*1 year*
Units of Credit	*1*

Spanish 1 is an introductory language course in which students acquire basic communication skills on a variety of everyday situations. In order to support the communicative goals of the course, vocabulary and grammar are introduced in context, and students engage in a variety of activities that require them to use the language for authentic purposes, as well as to read and understand different types of text. Additionally, students are exposed to various aspects of the culture of Hispanic countries and are asked to draw comparisons with the target language and their own and make connections with other subjects. This course covers the following topics: personal details, appearance and character; family and friends; at home and at school; daily routines; sports and leisure; shopping; food and drink; physical health; employment; holidays and transport; neighborhood; physical geography and environment. It also concentrates on the use of the present tense, as well as of high frequency vocabulary. Spanish is the language of instruction and communication in this class. Evaluation is based on summative assessments of the students' productive (speaking and writing) and receptive (reading and listening) skills. This course is offered to students with little or no previous exposure to Spanish.

Spanish 2

Prerequisite	*Completion of HS Spanish 1, or the equivalent*
Duration	*1 year*
Units of Credit	*1*

In the Spanish level 2 courses, students begin to move towards some independence, especially in their productive (oral and written) communication. Students will improve productive skills through the continued use of receptive (reading and listening) activities with an emphasis on use in context. Spanish is predominantly the language of instruction and communication in this class. The themes covered this year are: Interpersonal and Familial Relationships; My community; Discovering India; Food and Drink; Physical health; My childhood; Work and play; Physical Geography and Environment . Speaking activities focus on simulating real use and

help connect with varied other skills. Students explore new aspects of the target culture and make connections with different areas of their studies. Evaluation is based on summative assignments on students' productive and receptive abilities.

Spanish 3

Prerequisite	*Completion of HS Spanish 2, or the equivalent*
Duration	*1 year*
Units of Credit	*1*

Spanish 3 students develop more advanced communication skills on a variety of everyday and increasingly specialized situations. In order to support the communicative goals of the course, vocabulary and grammar are introduced in context, and students engage in a variety of activities that require them to use the language for authentic purposes, as well as to read and understand different types of text. Additionally, students continue to investigate various aspects of the culture of Hispanic countries and are asked to draw comparisons with the target language and their own and make connections with other subjects. This course is organized into the following topics: Personal details. Personal relationships. Professions. Physical health. Technological advances. Community service. Free time: holidays and travel. Environmental concerns.

Spanish is the language of instruction and communication in this class. Evaluation is based on summative assessments of the students' productive (speaking and writing) skills through oral presentations and interviews, essays, and written exams and receptive (reading and listening) skills through listening exercises, reading comprehension activities, and other receptive assessments. This course is required for entry into HS Spanish AP Language and Culture and HS Spanish IB Language B courses.

IB Spanish *ab initio*

Prerequisite	*No previous experience in the language is required, all students must be IB Diploma candidates*
Duration	*2 years*
Units of Credit	*2*

IB Spanish ab Initio provides students with the opportunity to explore the Spanish language as well as to develop intercultural understanding. Through the development of receptive, productive and interactive skills, students will be able to respond and interact appropriately in a defined range of everyday situations. The curriculum is based in the IB language B objectives. In order to support the goals of the course, vocabulary and grammar are introduced in context, and students

engage in a variety of activities that require them to use the language for authentic purposes, as well as to read and understand different types of text. Additionally, students are exposed to various aspects of the culture of Hispanic countries and are asked to draw comparisons with the target language and their own and make connections with other subjects. This course covers the following themes: individuals and societies, urban and rural environment, and leisure and work. It concentrates on the use of the indicative tenses, the present subjunctive, and high frequency vocabulary. Spanish is the language of instruction and communication in this class. Evaluation is based on summative assessments of the students' productive (speaking and writing) and receptive (reading and listening) skills based on the IB objectives. This is a two-year course offered to students in grade 11 and 12 with little or no previous exposure to Spanish. At the end of this course students will be prepared and required to take the IB Spanish *ab Initio* exam.

IB Spanish Language B SL/HL

Prerequisite	*Successful completion of Spanish level 3.*
Duration	*2 years*
Units of Credit	*2*

IB Spanish Language B is an *additional* language-learning course that may be studied at either standard level (SL) or higher level (HL). In both levels, the main focus of the course is to develop a high degree of linguistic competence and intercultural understanding through the study and use of a range of material that extends from everyday oral exchanges to literary texts, and relates to the cultures of Spanish speaking countries. The curriculum is based on the IB language B objectives. In order to support the goals of the course, vocabulary and grammar are studied in context, and students engage in a variety of activities that require them to use the language for authentic purposes. Students are also asked to draw comparisons with the target language and their own and to make connections with other subjects. Spanish is the language of instruction and communication in this course.

There is a common syllabus for SL and HL, with the study of two literary works, originally written in Spanish, as an additional component of the HL course. The themes covered in these courses are social relationships, global issues, and communication and media (core themes); and two themes selected from the options: cultural diversity, customs and traditions, health, leisure, and science and technology. *(In the new IB curriculum, first exams given in May 2020, students will explore the themes of Identities, Experiences, Human ingenuity, Social organization*

and Sharing the Planet.) In addition to the literature component, HL and SL differ from each other by the assessment objectives and criteria and the number of teaching hours.

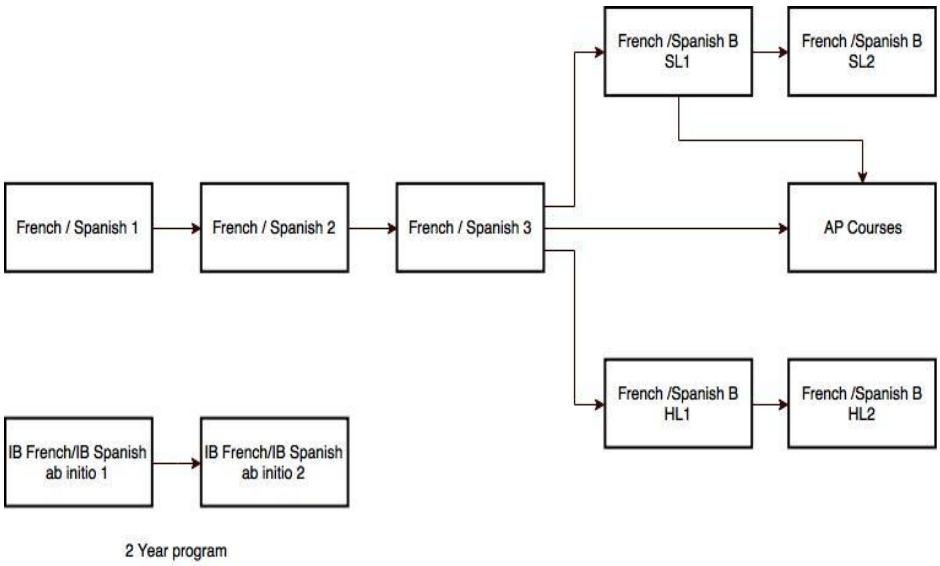
Evaluation consist of summative assessments of the students' productive (speaking and writing) and receptive (reading and listening) abilities based on the IB objectives. This is a two-year course offered to students in grade 11 and 12 who have studied Spanish for four or more years and who have a strong interest in the language. After completing the first year of this course, students have the option to take AP Spanish or continue with the second year of this program. At the end of this course students will be prepared and required to take the IB Spanish Language B SL or HL exam.

AP Spanish Language and Culture

Prerequisite	*Successful completion of Spanish B SL Year 1, or completion of level 3 with a grade of B or better and teacher recommendation*
Duration	*1 year*
Units of Credit	*1*

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). The curriculum is based on the AP objectives and cover the prescribed themes: science and technology, personal and public Identities, families and communities, global challenges, contemporary life, and beauty and aesthetics. Assessments is based on the objectives. Evaluation is based on summative assessments of the students' productive (speaking and writing) and receptive (reading and listening) skills based on the AP objectives. This is an accelerated one-year course offered to students in grade 11 or 12 who have studied Spanish for four or more years and who have a strong interest in the language. At the end of this course students will be prepared and required to take the AP Spanish Language and Culture exam.

Course Sequence Map



Social Studies

The Social Studies Department at AISC is committed to providing a program that will encourage reflective and analytical thinking and de-emphasize rote learning. It is our intent that students learn how to make their own interpretations so by the time they leave school they are able to think and learn independently and are aware of their responsibilities as global citizens. To achieve these ends we:

- promote and encourage the application of compassion, thoughtfulness, and equality
- present the social studies as a form of inquiry
- develop students' awareness of the roles of personal bias and credibility when analyzing sources
- encourage the continuous development of aforementioned skills
- prepare students for the rigors of university studies

As part of AISC's graduation requirements, students must complete three credits of social studies. Students in Grades 9 and 10 must complete the required social studies course at each level. The remaining credit can be earned by taking one of several elective courses in Psychology, Economics, Entrepreneurship, or Government, or by completing a social studies course as a participant in either the Advanced Placement or International Baccalaureate Programs.

Social Studies 9

Prerequisite	*Required of all students in Grade 9*
Duration	*1 year*
Units of Credit	*1*

Social Studies 9 is an integrated course based on standards from the C3 Framework. The class intends to develop student capacities in the core disciplinary areas of History, Geography, Economics, and Civics. The goal of this course is to equip students with the tools they will need for conducting inquiry-based research, interpreting data, examining perspectives, assessing claims, and presenting arguments within a social science context. History and geography will be the primary social studies disciplines used, with civics and economics secondarily represented.

Content for the course will be selected from a variety of Modern World History topics (1500 AD - Present). In the first semester, students will be participate in a series of skill-based workshops before selecting a topic for a historical research project around an annual theme (determined by the National History Day organization). Students will present this research and culminating project at our AISC History Day Celebration. In the second semester, students will explore the physical and cultural geography of two important regions of the world: the Indian Subcontinent and the Middle East. While geography skills will be emphasized, students will also learn some of the history, economics, and politics of these regions. This "regional studies" approach continues in Social Studies 10.

Social Studies 10

Prerequisite	*Required of all students in Grade 10*
Duration	*1 year*
Units of Credit	*1*

Social Studies 10 is an integrated course based on standards from the C3 Framework. The class intends to develop student capacities in the core social studies disciplines of history, geography, economics, and civics. The goal of this course is to equip students with the tools they will need for conducting inquiry-based research, interpreting data, examining perspectives, assessing claims, presenting arguments, and evaluating policy options within a social science context. Civics and economics will be the primary social studies disciplines used, with geography and history secondarily represented.

In the first semester, students will focus on the regions of Europe and East Asia. Students will explore the tension between conflict and cooperation, and will investigate how countries cooperate when they have political differences, economic differences, and a history of conflict. In the second semester, students will explore the challenges facing the developing world, with focus on Africa and Latin America. Students will explore the challenges of sustainable development. They

will investigate issues facing developing countries, research potential policy options which might alleviate the issues, and collaborate in order to create project-based sustainable solutions for shared global issues.

Introduction to Economics

Prerequisite	*Successful completion of Social Studies 9*
Duration	*1 semester*
Units of Credit	*0.5*

Introduction to Economics is a general survey course that introduces students to a variety of fundamental economic concepts. Students will learn about microeconomics by focusing on the of role scarcity and incentives in decision-making, supply and demand, the price system, market failures, and the role of government in achieving the best outcome for society. Throughout the course, students will focus on "thinking like an economist" and using the tools of the disciple to understand and explain real world events. An important element of the class will require that students work collaboratively on a project that investigates an current issue from an economic perspective. *Students in Grade 10 may elect to take this course in addition to Social Studies 10.*

Introduction to Psychology

Prerequisite	*Successful completion of Social Studies 9*
Duration	*1 Semester*
Units of Credit	*0.5*

Introduction to Psychology examines a variety of concepts and tools used to further the understanding of behavior and mental processes. Scientific inquiry and research methods are at the center of the discipline. Students will explore ways to measure and explain behavior at a variety of levels, ranging from genetic and brain-based influences on behavior to cultural and social influences. Psychological knowledge enhances our understanding of human development, emotion and motivation, cognition, learning processes, perceptual systems and sociocultural interactions. This course promotes the skills of critical thinking, problem solving, and teamwork. Students benefit from learning and applying psychological perspectives on personal and contemporary issues and learn the rules of evidence and theoretical frameworks of the discipline. *Students in Grade 10 may elect to take this course in addition to Social Studies 10.*

Comparative Government

Prerequisite	*Successful completion of Social Studies 9*
Duration	*1 semester*
Units of Credit	*0 .5*

Comparative Government explores the governments and politics of several of the world's major nations and rising powers. Students will learn how political systems are classified and study examples of highly industrialized democracies, communist and post-communist systems, and less developed nations. They will also analyze and compare the functions of these governments and the political processes that exist within them. Particular consideration is given to contemporary world issues, with an emphasis on developing comparative analytical skills and abilities. This course will culminate with a comparative inquiry between a country of student choice and one covered in class. *Students in Grade 10 may elect to take this course in addition to Social Studies 10 .*

Entrepreneurship

Prerequisite	*Successful completion of Social Studies 9*
Duration	*1 Semester*
Units of Credit	*0.5*

Entrepreneurship introduces students to the excitement and challenges of starting a business. Students will learn about entrepreneurship by becoming entrepreneurs, and the majority of assessments will be project-based. The goal is to provide students with multiple hands-on opportunities to use the design cycle to imagine new goods and services and attempt to bring these to market in order to develop the insights needed to discover and create entrepreneurial opportunities. Students will create, manage, and market products and services of their own design, and collaborate with other students in Design Technology and Graphic Design courses. Students will be required to work in collaborative teams for the majority of these projects. *Students in Grade 10 may elect to take this course in addition to Social Studies 10 .*

AP Economics (Microeconomics and Macroeconomics)

Prerequisite	*Successful completion of Social Studies 10. Grade 9 students may apply to waive pre-requisite; subject to Head of Department approval.*
Duration	*1 year*
Units of Credit	*1*

AP Economics is designed to provide a learning experience equivalent to a typical college introductory course in economics. The course aims to give a thorough understanding of the principles of micro- and macroeconomics as they apply to individual decision makers, consumers and producers within the larger economic system and to the economic system as a whole. The course empowers students to use economic reasoning in their decision-making and helps them learn how economic theory can be applied to understand and analyze environmental and natural resource problems. *At the end of this course students will be prepared and required to take the AP Microeconomics and/or the AP Macroeconomics exam.*

AP Human Geography
(*offered alternating years; available in 19/20*)

Prerequisites	*Successful completion of Social Studies 10. Grade 9 students may apply to waive pre-requisite; subject to Head of Department approval.*
Duration	*1 year*
Units of Credit	*1*

The aim of this AP course is to provide students with a learning experience equivalent to that obtained in most college-level introductory human geography courses. The purpose of the AP Human Geography course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. *At the end of this course students will be prepared and required to take the AP Human Geography Exam.*

AP Psychology
(*offered alternating years; available in 18/19*)

Prerequisite	*Successful completion of Social Studies 10. Grade 9 students may apply to waive pre-requisite; subject to Head of Department approval.*
Duration	*1 year*
Units of Credit	*1*

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. This course stresses skills in discussion, critical thinking, reading and writing. Students must be ready to meet the challenges of a rigorous academic curriculum that is equivalent to an introductory college-level course in psychology. *At the end of this course students will be prepared and required to take the AP Psychology exam.*

IB Economics HL/SL

Prerequisite	*Successful completion of Social Studies 10*
Duration	*2 years*
Units of Credit	*2*

This course is designed to develop disciplined economic reasoning skills, an ability to apply tools of economic analysis to situations and data and explain the findings clearly, an understanding of how individuals and societies organize themselves in the pursuit of economic objectives, an ability to evaluate economic theories, concepts, situations and data in a way which is considered rational and unprejudiced and international perspectives which feature a tolerance and understanding of the diversity of economic realities in which individuals and societies function. *At the end of this course students will be prepared and required to take the IB Economics HL or SL exam.*

IB Psychology HL/SL

Prerequisite	*Successful completion of Social Studies 10*
Duration	*2 years*
Units of Credit	*2*

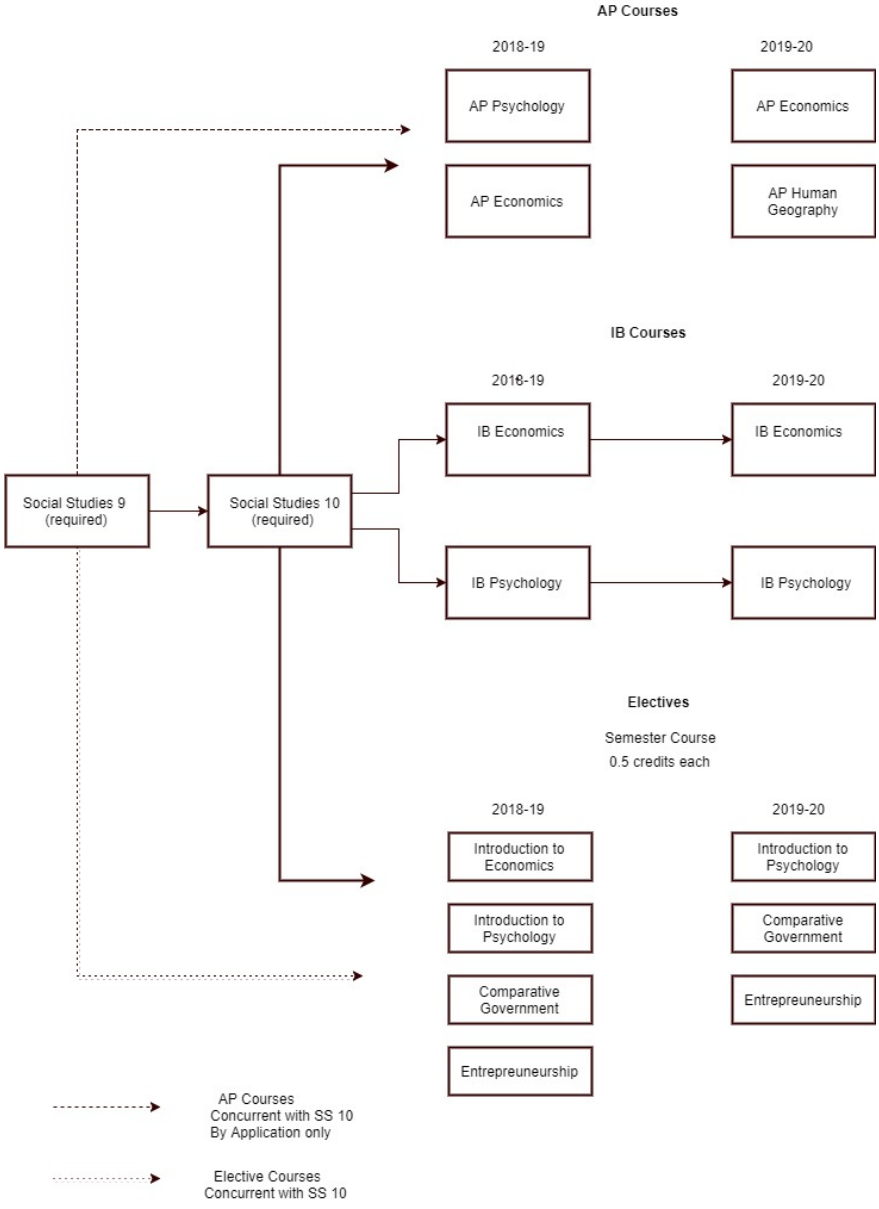
IB psychology examines the interaction of biological, cognitive and sociocultural influences on human behavior, thereby adopting an integrative approach. Understanding how psychological knowledge is generated, developed and applied enables students to achieve a greater understanding of themselves and appreciate the diversity of human behavior. The ethical concerns raised by the methodology and application of psychological research are key considerations in IB Psychology. Students will develop an awareness of how psychological research can be applied for the benefit of human beings, learn how ethical practices are upheld in psychological inquiry, develop an understanding of the biological, cognitive and socio-cultural influences on human behavior, develop an understanding of alternative explanations of behavior and understand and use diverse methods of psychological inquiry. *At the end of this course students will be prepared and required to take the IB Psychology HL or SL exam.*

Theory of Knowledge

Prerequisite	*Offered to Grade 11-12 students only*
Duration	*1 year - 2nd semester of Grade 11 and 1st semester of Grade 12.*
Units of Credit	*1*

Theory of Knowledge is a key element of the International Baccalaureate Diploma Program. The purpose of this interdisciplinary course is to stimulate critical reflection on the knowledge and the experience of students, both in and outside the classroom and including the various subject areas studied by them in their other classes. Additionally, the course seeks to understand the sources of, historical development of, and theories about knowledge. Through the analysis of concepts and arguments, the course seeks to encourage healthy skepticism in order to encourage students to acquire a critical awareness of how they and others make sense of the world, along with increasing students' abilities to express ideas in a clear and convincing manner.

Course Sequence Map



SCIENCE

The science department is committed to offering a rigorous and diverse program that emphasizes collaboration, problem-solving, and reflection. Through an inquiry and project-based learning approach we:

- create an environment that focuses on conceptual understanding and promotes effective application of the scientific knowledge gained
- help students develop scientific understanding and prepare them for future challenges
- motivate students to become effective collaborators and self-directed learners
- inspire students to pursue further studies in science and related fields
- raise awareness about the important role science plays in society and help students become informed and ethical citizens

The comprehensive program offered includes core classes in Biology, Chemistry, and Physics, advanced courses (AP and IB) in Biology, Chemistry, Physics, and Environmental Science, and a range of elective courses to meet the interests and needs of our students.

All students are expected to take Biology in grade 9, followed by Chemistry and/or Physics in grade 10. Elective courses can be taken from grade 10 in addition to a core class. In grade 11/12, students can opt for the two-year IB Diploma courses, take Advanced Placement courses and/or take elective courses. Please reference the course sequence map as some courses are offered on alternate years.

All advanced and elective courses have prerequisites, so it is important to read the course descriptions carefully to ensure that you select an appropriate course sequence that meets your needs.

Biology (taken by all 9th grade students)

Duration: *1 year*
Units of Credit: *1*

Biology as the science of life has experienced an information explosion in the past few decades and, through this course, students will develop the understanding and skills to interpret this rapidly changing and exciting field. The course is based on the innovative Next Generation Science Standards (NGSS) providing a high-quality science education that will serve them throughout their educational and professional lives. Throughout this course students will be able to ask questions, define problems, construct explanations based on data analysis and design

solutions. Specific biological concepts covered include biochemistry, matter and energy transformations (respiration and photosynthesis), evolution, inheritance, and ecology and biodiversity. This course will provide a foundation for the advanced AP and IB Biology courses. Student progress will be assessed against the standards via written responses, experiential investigation, laboratories, unit tests, as well as creative projects.

Chemistry

Prerequisite:	*Successful completion of Biology and Integrated Math 1, or the equivalent*
Duration:	*1 year*
Units of Credit:	*1*

Chemistry matters! Through this course students will deepen their understanding of the physical world, allowing them to respond to the growing challenges facing our planet. Chemical principles underpin all industrial, medical, biological and environmental advancements. Chemistry, as a creative experimental science, is a prerequisite for many other disciplines in higher education such as medicine, biological research, and environmental science. Throughout this course students will continue to refine their abilities to ask questions, define problems, construct explanations, and design solutions. This course provides a foundation for the advanced AP and IB Chemistry courses and is aligned with the innovative Next Generation Science Standards (NGSS) Framework. The core disciplinary ideas include the structure and properties of matter, chemical reactions, and energy. Student progress will be assessed against the standards via written responses, experiential investigations, laboratories, unit tests, and creative projects.

Physics

Prerequisite:	*Successful completion of Biology and Integrated Mathematics 1 or the equivalent*
Duration:	*1 year*
Units of Credit:	*1*

Physics, the fundamental science, is a one-year course with a strong focus on conceptual understanding of the subject matter. The course places emphasis on the key concepts and principles as described in Next Generation Science Standards (NGSS), and will focus on skills of scientific inquiry, analysis and problem-solving. Here, students learn the basic motions of the universe and the equations that govern them. The first half of the course concentrates on mechanics including kinematics, projectile motion, Newton's laws of motion, friction, work, energy & power, gravitation and rotational dynamics. The second half focuses on thermodynamics, oscillations, waves and optics, electromagnetism, atomic, nuclear and particle physics.

Students will have opportunities to engage in relevant science and engineering practices to demonstrate their understanding and ability to apply the key concepts and principles learned by doing hands on activities, virtual and physical labs and more. Application of these concepts is explored through the problem-solving component of the course that complements the theory. Students will be assessed through summative semester projects, labs (summative and formative), and summative and formative unit end tests.

Anatomy and Physiology
(offered alternating years; available in 19/20)

Prerequisite:	*Successful completion of Biology with a "B-" or better, or the equivalent*
Duration:	*1 year*
Units of Credit:	*1*

This elective science course includes a detailed study of human body systems. Topics include anatomical structures, homeostatic balance, the relationship between structure and function, and the interrelationships between body systems. This course is recommended for students interested in a health-related career, especially those in medicine, nursing, physical therapy, and athletic training. The course may also be helpful for those students who plan to enter education as either a life-science or physical education teacher.

Students will acquire skills used in the classification of data, experience in oral and written communication of data, and skills in drawing logical inferences and predicting outcomes. Students will apply the principle of physiology to human health and well-being and evaluate the applications and career implications of physiology and anatomy principles. Laboratory activities will include several microscopic analyses of tissue specimens as well as several dissections to accompany the subject matter.

Environmental Science
(offered alternating years; available in 19/20)

Prerequisite:	*Successful completion of Biology and Integrated Mathematics 1, or the equivalent*
Duration:	*1 year*
Units of Credit:	*1*

Environmental Science is an interdisciplinary course that examines man's interaction with the environment. The course is designed to immerse students in the physical, biological, and geological systems that shape our environment. The goal of this program is to provide students with the background to make use of scientific concepts, principles, and modern science practices to analyze environmental issues, both natural and human induced. Students will learn to apply knowledge from the basic sciences and mathematics to solve environmental issues and global problems. The main focus will be to understand how the biosphere changes naturally and how human activities are altering it. This will be a first step towards AP Environmental Science.

Astronomy
(*offered alternating years; available in 19/20*)

Prerequisite:	*Successful completion of IM2 course with a grade of B- or better or equivalent, and teacher recommendation*
Duration:	*1 semester*
Units of Credit:	*0.5*

This is a one semester course designed to introduce the qualitative theories and concepts in basic astronomy. The first half of the course is a brief study of the planets in our solar system, the types of galaxies, constellations, star clusters and a general knowledge of our ancient and modern astronomers. The second half of the course will be a detailed study of stars and the factors that determine their evolutionary stages followed by an overview of space exploration missions and a few methods that scientists use to study distant stars. A basic mathematical approach will be included in the study of distance scales and parallax. Laboratory work, research, videos, debates, discussions and occasional fieldwork form a vital component of the course.

Explorations in Astrophysics
(*offered alternating years; available in 18/19*)

Prerequisite:	*Successful completion of Integrated Math 2 grade of B- or better or equivalent, and teacher recommendation.* Successful completion of Astronomy would be an added advantage.
Duration:	*1 semester*
Units of Credit:	*0.5*

This is a one-semester course designed to extend the qualitative theories and concepts learned in basic astronomy. The course will begin with a brief study of the historical approach to astrophysics, astronomers and the physical laws governing the Universe. A major part of the course will be a qualitative and quantitative

detailed study of stars and the factors that determine their evolutionary stages followed by an overview of space exploration missions and methods that scientists use to study distant stars. The course will include analysis of the Hertzprung-Russel diagram to interpret luminosity, brightness and classify stars followed by a mathematical (Algebraic) approach to problem solving. Laboratory work, research, videos, debates, discussions and occasional fieldwork form a vital component of the course. (Standards: based on NGSS).

Forensic Science

(*offered alternating years; available in 18/19*)

Prerequisite:	*Successful completion of biology.*
Duration:	*1 year*
Units of credit:	*1*

Forensic science refers to the application of scientific knowledge and methods to questions of civil and criminal law. In this course students will learn about the development of forensic science and the work done by the different fields within forensics. Through a hands-on, lab-based approach, students will gain experience in the methods used to collect, examine, and analyze physical evidence to establish connections between suspects, events, and circumstances. The scientific method—identifying questions, forming hypotheses, collecting and analyzing data, examining patterns and relationships, and drawing evidence-based conclusions—is a central theme throughout the course. A critical examination through case study analysis of the use and limitations of forensic evidence in court is another major focus of this course. Forensic science is a highly interdisciplinary subject, drawing on many fields within biology, chemistry, physics, psychology, law and mathematics. The course is aligned with the Next Generation Science Standards as well as relevant parts of the C3 Framework for Social Studies. Forensic scientists are often required to testify in court to justify their analysis and defend their methods and conclusions. The course will therefore include multiple opportunities for students to communicate their findings and ideas in a clear and convincing manner through written reports, presentations, and multimedia projects.

IB Biology HL/SL

Prerequisite:	*Successful completion of Biology and Chemistry with a grade of B- or better or the equivalent, and teacher recommendation*
Duration:	*2 years*
Units of Credit:	*2*

The IB Biology course includes the study of cells, biochemistry, genetics, evolution, plant biology, ecology and conservation as well as human anatomy, health and physiology. The course is designed to enable students to apply knowledge,

methods, and techniques that characterize science and technology to problem solving within a global context. Standard scientific method and experimental design will be used in inquiry-based and knowledge-based laboratory investigations. Students enrolled in the IB program will also participate in an interdisciplinary Group 4 (field work) Project. *At the end of this course students will be prepared for and required to take the IB Biology HL or SL exam.*

IB Chemistry HL/SL

Prerequisite:	*Successful completion of Chemistry and Integrated Math 2 with a grade of B- or better or the equivalent, and teacher recommendation*
Duration:	*2 years*
Units of Credit:	*2*

The IB Chemistry course will allow students to deepen their understanding of the fundamentals of chemistry and explore how these relate to everyday life. Topics covered include quantitative chemistry, atomic structure, periodicity, bonding, thermodynamics, kinetics, equilibrium, acids and bases, redox, and organic chemistry. In addition students will study one of the following four options: materials, biochemistry, energy, or medicinal chemistry. The course is designed to enable students to apply the knowledge, methods, and techniques that characterize science and technology to problem-solving within a global context. Standard scientific method and experimental design will be used in inquiry-based and knowledge-based laboratory investigations. Students enrolled in the IB program will also participate in an interdisciplinary Group 4 (field work) Project. IB Chemistry students should expect to be held to a high standard, doing more sophisticated laboratory experiments and increasing the amount of time that they spend studying the material independently. At the end of this course students will be prepared for and required to take the IB Chemistry HL or SL exam.

IB Physics HL/SL

Prerequisite:	*Successful completion of Physics and/or Chemistry and Integrated Math 2 with a grade of B- or better or equivalent, and teacher recommendation*
Duration:	*2 years*
Units of Credit:	*2*

IB Physics is an Algebra-based Physics course where students explore topics such as mechanics, waves and oscillations, thermal physics, electricity and magnetism, atomic, nuclear and particle physics and energy production through constructivist learning, discussions and scientific investigations.

Students will be able to appreciate scientific study and creativity within a global context, apply a body of knowledge, methods and techniques that characterize science and technology, develop an ability to analyze, evaluate and synthesize

scientific information, develop experimental and investigative scientific skills including the use of current technologies, develop and apply 21st century communication skills in the study of science, become critically aware, as global citizens, of the ethical implications of using science and technology, develop an appreciation of the possibilities and limitations of science and technology and develop an understanding of the relationships between scientific disciplines and their influence on other areas of knowledge. They are assessed at the end of each unit. *At the end of this course students will be prepared for and required to take the IB Physics HL or SL exam*

AP Chemistry

(*offered alternating years; available in 19/20*)

Prerequisite:	*Successful completion of Chemistry and Integrated Math 2 with a grade of B or better, and English with a grade of B- or better, or the equivalent, and teacher recommendation*
Duration:	*1 year*
Units of Credit:	*1*

This fast-paced class is designed to be the equivalent of the chemistry course normally taken in the first year of university. The course centers on the following six Big Ideas: Structure of Matter, Bonding and Intermolecular Forces, Chemical Reactions, Kinetics, Thermodynamic, and Equilibrium. Students attain a depth of understanding of these topics, and a competence in solving chemical problems. The course strives to assist students to develop their inquiry skills, think clearly, and express ideas with clarity and logic. Students should expect to be held to a higher standard with respect to using a college-level text, doing more sophisticated laboratory experiments, and increasing the amount of time spent studying the material. *At the end of this course students will be prepared for and required to take the AP Chemistry exam.*

AP Physics 1

Prerequisite:	*Successful completion of Chemistry and/or Physics and Integrated Math 2 with a grade of B- or better, or equivalent, and teacher recommendation*
Duration:	*1 year*
Units of Credit:	*1*

AP Physics 1 is an algebra-based course where students explore topics such as Newtonian mechanics (including rotational motion); work, energy and power, mechanical waves and sound, and introductory simple circuits. Students develop scientific critical thinking and reasoning skills through inquiry based learning. They

develop a deep understanding of foundational principles of physics in classical mechanics and modern physics by applying these principles to complex physical situations that combine multiple aspects of physics through discussions, debates, problem solving and inquiry based laboratory investigations.

AP Environmental Science

(offered alternating years; available in 18/19)

Prerequisite:	*Successful completion of Biology, Integrated Math 1 and either Environmental Science or Chemistry with a grade of B or better, and a B- in English or better, or the equivalent, and teacher recommendation*
Duration:	*1 year*
Units of Credit:	*1*

The AP Environmental Science Course is designed to be the equivalent of a one-semester introductory college course in environmental science. Unlike most other introductory-level college science courses, environmental science draws from a wide variety of disciplines, including geology, biology, environmental studies, chemistry, and geography. The course places a special emphasis on the laboratory component and the study of environmental issues from a sociological or political perspective, thus providing opportunities for students to understand the immediate problems related to their environment and come up with realistic solutions.

The goals of the course are to provide students with an understanding of the scientific principles, concepts, and methodologies required to understand the interrelationships in the natural world, to identify and analyze environmental problems both natural and human made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Student progress against the AP standards will be assessed by mid-unit and end-unit written tests and laboratory investigations. At the end of this course students will be prepared for and required to take the AP Environmental Science exam.

AP Biology

(offered alternating years; available in 18/19)

Prerequisite:	*Successful completion of Biology, Integrated Mathematics 2 and Chemistry with a grade of B or better, and English with a grade of B- or better, or the equivalent, and teacher recommendation*

Duration: *1 year*
Units of Credit: *1*

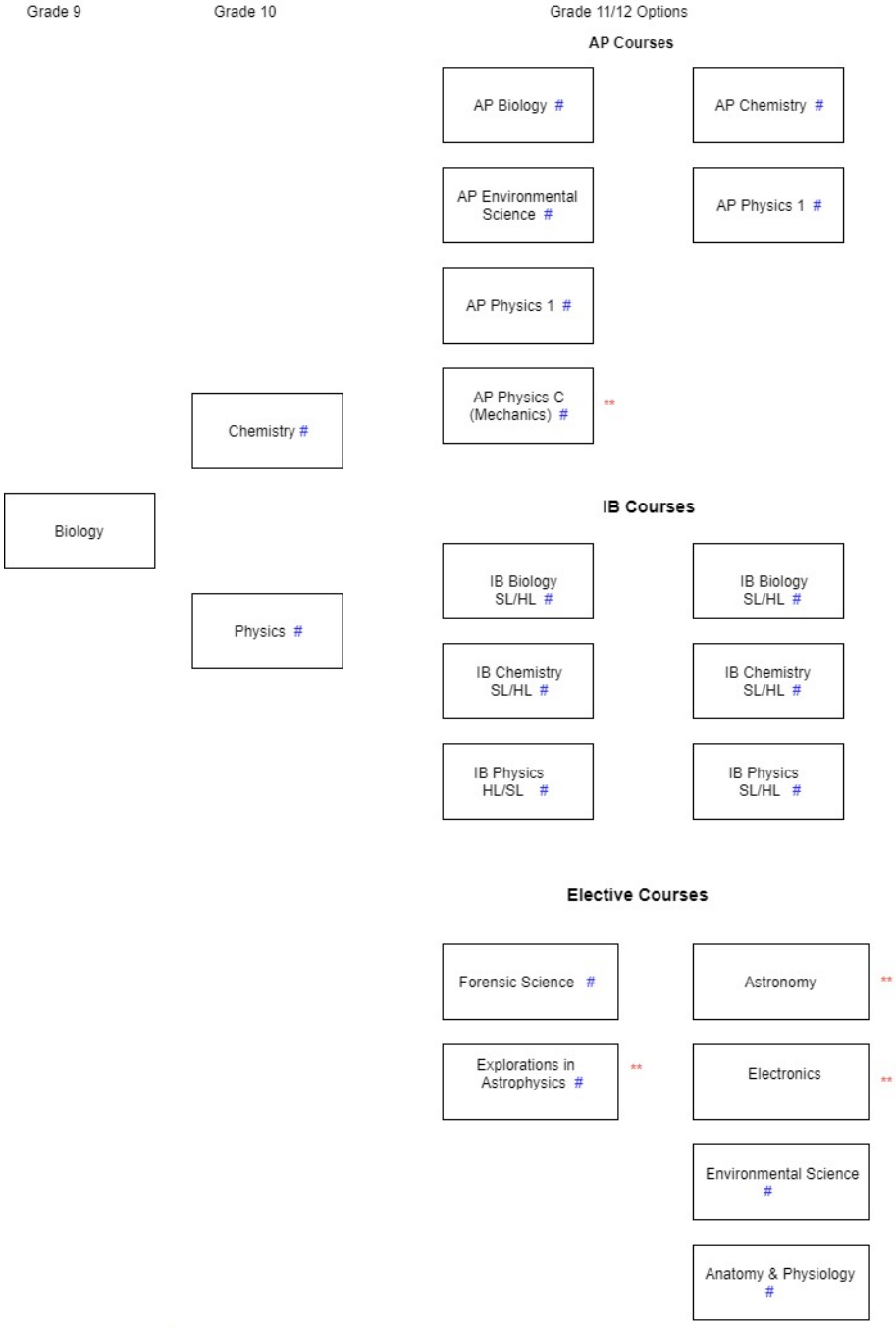
AP Biology is a fast-paced course designed to be the equivalent of a two-semester college introductory biology course usually taken by science majors during their first year. This course aims to develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. Because content, inquiry, and reasoning are equally important in AP biology laboratory experience and techniques are stressed. *At the end of this course students will be prepared for and required to take the AP Biology exam.*

AP Physics C (Mechanics)
(offered alternating years; available in 18/19)

Prerequisite: *Successful completion of Physics with a grade of B- or better, concurrent enrollment in AP Calculus AB, IB Math SL Year 2 or IB Math HL Year 1 or the equivalent, and teacher recommendation*
Duration: *1 semester*
Units of Credit: *0.5*

This course ordinarily forms the first part of the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. The sequence is parallel to or preceded by Mathematics courses that include Calculus. Methods of Calculus are used wherever appropriate be it in formulating physical principles and/or in applying them to physical problems. The focus is mainly on the application of concepts through intense problem solving sessions with adequate use of Calculus. The AP Physics C- Mechanics course is an in depth study of mechanics. The student is expected to develop strong problem solving skills, apply the laws of physics to explain physical situations and demonstrate strong conceptual understanding. The course includes a laboratory component but is not assessed for the same by an examination.

Course Sequence Map



\# *This course has prerequisites*

** *This is a semester course*

Mathematics

The Mathematics department at AISC aims to equip students with the essential mathematical knowledge and skills of reasoning, problem solving and communication; and, most importantly, with the ability and the initiative to continue learning on their own. We value multiple approaches encouraging students to problem solve using mathematical representation and language, verbally, using graphs and technology, emphasizing process over product. We help students develop their abilities to explore, make conjectures, reason logically, and communicate mathematical ideas. Recognizing that individual students learn in different ways, we provide opportunities for all students to construct and deepen their own knowledge, and expand their mathematical horizons. We seek to develop an enriching environment that pushes students to think critically as problem solvers and to recognize the intrinsic beauty of mathematics. To accomplish these goals, the Common Core State Standards for the introductory courses together with the International Baccalaureate and the Advanced Placement programs for advanced level courses, serve as our curricular framework. All standards are internationally benchmarked, and are based on a philosophy of teaching and learning that is consistent with the most current research.

Integrated Mathematics 1

Prerequisite	*Successful completion of grade 8 mathematics*
Duration	*1 year*
Units of credit	*1*

Integrated Mathematics 1 formalizes and extends the mathematics that students learn in the middle grades. The critical areas, organized into units, deepen and extend the understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend. Students will interpret arithmetic sequences as linear functions and geometric sequences as exponential functions. They will master the concepts of domain and range. They will explore systems of equations and inequalities, and use regression techniques to describe linear relationships. They will establish triangle congruence criteria, based on analyses of rigid motions and formal constructions. Finally, will students use a rectangular coordinate system to verify geometric relationships, including properties of special triangles and quadrilaterals, and slopes of parallel and perpendicular lines. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Integrated Mathematics 2

Prerequisite	*Successful completion of integrated mathematics* 1
Duration	*1 year*
Units of credit	*1*

The focus of Integrated Mathematics 2 is on quadratic algebra and geometry. Students will learn to compare the characteristics and behavior of quadratic functions, to those of linear and exponential functions from the previous course. The need for extending the set of rational numbers arises, and complex numbers are introduced so that quadratic equations can be solved for all cases. Students will learn to extend the laws of exponents to rational exponents and explore distinctions between rational and irrational numbers by considering their decimal representations. They will create and solve equations, inequalities, and systems of equations, involving exponential and quadratic expressions. They will learn to establish a link between probability and data through conditional probability and counting methods, including their use in making and evaluating decisions. They will study similarity to understand right triangle trigonometry and its connection to quadratics through Pythagorean relationships. Finally, they will study the properties of circles, parabolas and their quadratic representations. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Integrated Mathematics 3

Prerequisite	*Successful completion of integrated mathematics* 2
Duration	*1 year*
Units of Credit	*1*

In Integrated Mathematics 3, students pull together and apply the accumulation of learning that they have from their previous courses, with the content grouped into four critical areas, organized into units. Students expand their repertoire of functions to include polynomial, rational, and radical functions. They expand their study of right triangle trigonometry to include general triangles and open up the idea of trigonometry applied beyond the right triangle as well as the study of the unit circle. They apply methods from probability and statistics to draw inferences and conclusions from data. And, finally, students bring together all of their experience with functions and geometry to create models and solve contextual problems. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

AP Calculus AB

Prerequisite	*Successful completion of Integrated Mathematics 3 with a grade of 'B' or better*
Duration	*1 year*
Units of Credit	*1*

The AP Calculus AB course is for the student with a strong mathematical background and is comparable to a one-semester calculus course in U.S. colleges and universities. The course is primarily concerned with developing the students' understanding of the concepts of calculus, and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results and problems being expressed graphically, numerically, analytically and verbally. The connections among these representations are important. Through the use of the unifying themes of limits, derivatives, integrals, applications, and modeling, the course becomes a cohesive whole rather than a collection of unrelated topics. These themes are developed using all the functions learned in the previous courses. Technology is used regularly to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. *At the end of this course students will be prepared to take the AP Calculus AB exam.*

AP Calculus BC

Pre-requisite	*Successful completion of Integrated Mathematics 3 with a grade of 'A' or better*
Duration	*1 year*
Units of Credit	*1*

The AP Calculus BC course is for the student with a strong mathematical background and is comparable to a two-semester calculus course in U.S. colleges and universities. This course emphasizes a multi-representational approach to calculus, with concepts, results and problems being expressed graphically, numerically, analytically and verbally. The connections among these representations are important. Through the use of the unifying themes of limits, derivatives, integrals, applications and modeling, the course becomes a cohesive whole rather than a collection of unrelated topics. These themes are developed using all of the functions that students have learnt in earlier courses. Additional topics such as sequences and series, parametric and polar functions, and logistic differential equations are also taught in the course. Technology is used to reinforce the relationships among the multiple representations of functions, to implement experimentation, and to assist in interpreting results. AP Calculus BC is an extension of AP Calculus AB rather than an enhancement. *At the end of this course students will be prepared to take the AP Calculus BC exam.*

AP Statistics

Pre-requisite	*Successful completion of Integrated Mathematics 3 with a grade of 'B' or better*
Duration	*1 year*
Units of Credit	*1*

The purpose of the AP course in Statistics is to introduce students to the major concepts and tools for analyzing data and drawing conclusions. Students will be exposed to four broad conceptual themes: describing patterns and departure from patterns, planning and conducting a study, exploring random phenomena using probability, and finally simulation and estimating population parameters while testing hypotheses. Additionally, this course will teach students how to communicate statistical methods, results and interpretations. Students will also learn how to use graphing calculators, and read computer outputs to enhance the development of statistical understanding. They will be involved in collecting information, communicating that information, solving problems and justifying the results. This course draws connections between all aspects of the statistical process, including design, analysis, and conclusions. *At the end of this course students will be prepared to take the AP Statistics exam.*

IB Mathematics SL

Prerequisite	*Successful completion of Integrated Mathematics 3*
Duration	*2 years*
Units of credit	*2*

The IB Mathematics Standard Level course is for students with knowledge of basic mathematical concepts from previous courses who are ready to extend their ideas. The course provides students with a sound mathematical background to prepare for future studies in the sciences and economics. The objective of the course is to develop logical, critical and creative thinking, and to enhance the ability to generalize results and transfer skills to alternative situations. Emphasis is laid on the development of communication skills using appropriate mathematical notations and terminology. The first year of the course synthesizes topics from Algebra and Geometry, including the study of functions, trigonometry, and vectors. In the second year of the course students will expand their understanding of probability, statistics and calculus. The use of graphic display calculators exposes students to technology and provides opportunities for visual interpretation of graphs. The internal assessment offers a framework for developing independence in mathematical learning in the form an independent research paper. Throughout the two years, students will complete projects to deepen their understanding. *At the end of this course students will be prepared to take the IB Math SL exam.*

IB Mathematics HL

Prerequisite *Successful completion of Integrated Mathematics 3 with a grade of 'B' or better*
Duration *2 years*
Units of credit *2*

This course is designed for students who are strong in mathematics and are capable of a more rigorous course at an accelerated pace. It emphasizes the multi-representational approach to developing the different concepts, problems, and results geometrically, numerically, analytically and verbally. It aims at developing an insight into the mathematical form and structure and the link between the concepts in the different topics. The course consists of the core and the optional parts. Students enrolled in the course are assumed to have mastered geometry and advanced algebra concepts. The first part of the course deals with topics such as the different functions and equations, trigonometry, vectors, statistics and probability. The second part of the course deals with differential calculus, integral calculus, and first order differential equations. There is an optional component of the course which involves selecting and analyzing one of the four topics namely statistics and probability, sets and relations, groups, and series and differential equations. Internal assessment in mathematics HL is integral part of the course and enables students to demonstrate the application of their skills and knowledge and pursue their personal interest. This piece of written works investigation in the form of an independent research paper. At the end of this course students will be prepared to take the IB Math HL exam.

Data Analysis (Elective)

Prerequisite *Successful completion of Integrated Mathematics 3*
Duration (1 semester) -Fall semester only
Units of credit *0.5*

This is a one-semester course designed to explore methods of collecting data, summarizing and exploring data distributions, graphical and numerical representations, linear regression, correlation and design of experiments. This course will provide students with an understanding of fundamental notions of data presentation and analysis and also emphasizes on using statistical methods for the exploration and analysis of data sets.

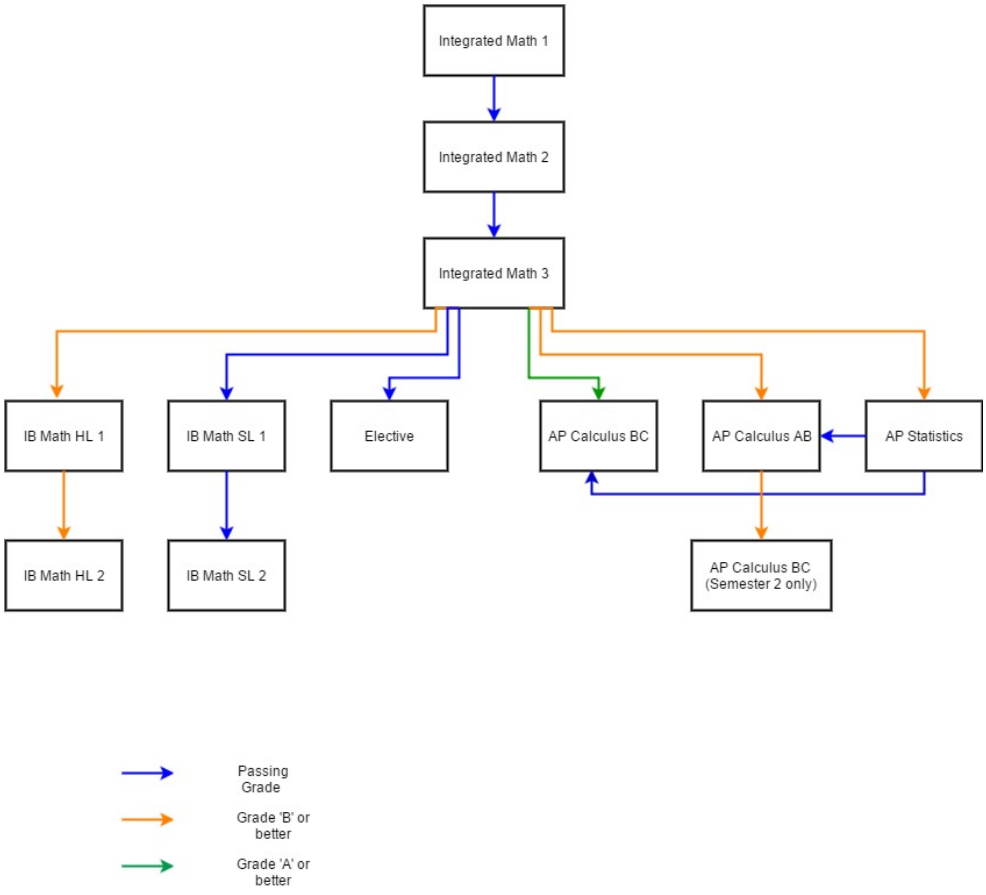
Personal Finance (Elective)

Prerequisite *Successful completion of Integrated Mathematics 3*
Duration (1 semester) - Spring Semester only
Units of credit *0.5*

This is a one-semester course designed to understand terminology relating to personal and business mathematics applications and apply basic math and statistical skills to the solution of both personal and business applications.
It also focuses on using common mathematical formulas to solve a variety of personal and business situations as well as applying knowledge of computer and calculator use in daily life.

The emphasis on this course will be on projects and applied tasks.

Course Sequence map



Performing Arts

The Performing Arts Department at AISC believes that a strong training in music, voice, and theatre are conduits for teaching creative thinking and self-confidence. Our mission is deeply aligned with the core values of AISC. We see performance as a powerful tool for promoting personal growth and communication. Through the performing arts our students learn to convey feeling and emotion, and how to make a human connection with the audience. Students of the performing arts learn to support one another, collaborate with others, and grow into well-rounded individuals, present and engaged in the world around them.

Music

Beginning Guitar

Prerequisite	*none*
Duration	*1 Semester*
Units of Credit	*0.5*

Beginning guitar is a non-performance course designed for beginning students wanting to learn the basics of music through acoustic guitar. No prior experience in music is required. The class is structured in an individualized format and will allow the motivated student to achieve the highest level of proficiency possible during the semester. Each student will be responsible for completing a series of technical skills and will demonstrate a developing and working knowledge of music theory.

Cadet Band

Prerequisite	*None*
Duration	*1 year*
Units of Credit	*1*

In the Cadet Band course students are introduced to playing a woodwind, brass or percussion instrument in a group setting. No prior knowledge of music is required. By the end of this first year, students will demonstrate characteristic tone on their instrument, count rhythms, keep a steady beat, read traditional music notation, and discuss their music preferences with appropriate vocabulary. Class time is used for group music rehearsal, while students complete their daily individual practice at home. Cadet Band members perform for their classmates during rehearsal and for the public at scheduled concerts.

Concert Band

Prerequisite	*Successful completion of Cadet Band or instructor approval*
Duration	*1 year*
Units of Credit	*1*

The Concert Band is an active, music-making ensemble. In this performance-based course, ensemble members work to build technical facility on their instrument individually and create artistic expression within the group collectively. The majority of class time will be spent rehearsing for and participating in live public concerts and in recording portfolios of intermediate wind band music. Concert Band members learn how to create authentic performances of music from a variety of times and places by exploring music theory, history, aural skills and analysis of form. Membership in the Concert Band demands significant at-home practice, occasional after-school rehearsals, and a commitment to all scheduled performances.

Symphonic Band

Prerequisite	*Successful completion of Concert Band or instructor approval*
Duration	*1 year*
Units of Credit	*1*

The Symphonic Band is AISC's flagship music ensemble. In this performance-based course, ensemble members strive to achieve the highest possible technical facility on their instrument individually and the deepest level of artistic expression within the group collectively. The majority of class time will be spent rehearsing for and participating in live public concerts and in recording portfolios of advanced wind band music. In order to create stylistically appropriate performances, Symphonic Band members will also explore music theory, history, aural skills and formal analysis, and will produce written critiques of a wide range of live and recorded examples. Membership in the Symphonic Band demands significant at-home practice, occasional after-school rehearsals, and a commitment to all scheduled performances.

Concert Choir

Prerequisite	*None*
Duration	*1 year*
Units of Credit	*1*

This course is designed to be practical in nature. Students may have sung in a choral setting previously, either in high school or middle school, though this is not a requirement.

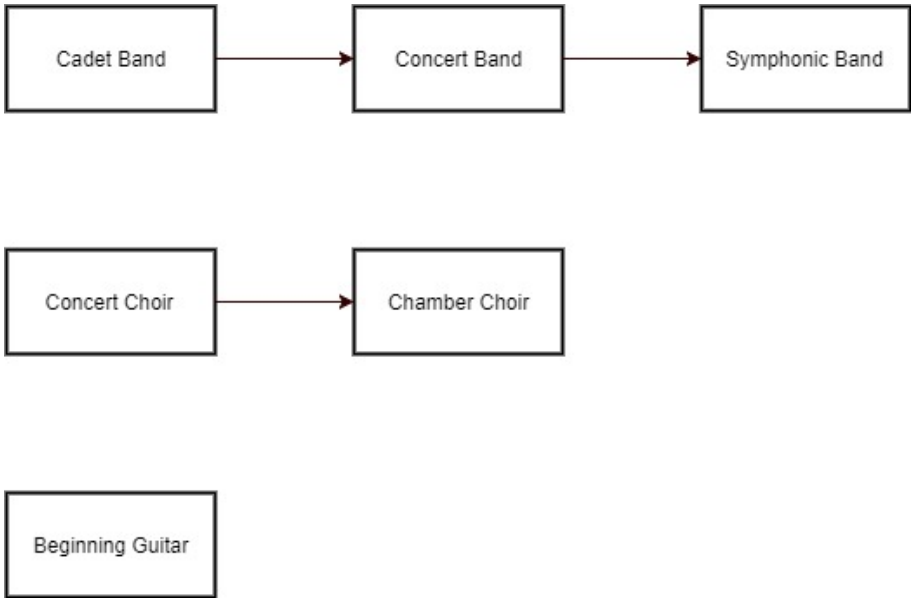
The course will cover a broad range of choral experiences, including large ensemble, small ensemble, quartets, trios, duets, and solo work. Course content will include proper vocal production, breathing technique, sight singing, music theory, and performance etiquette, plus the basics of musicology, history, and composers. Assessments will include rehearsal and concert performances with individual singing tests administered regularly. Theoretical and practical examinations are held at the end of each term.

Chamber Choir

Prerequisite	*One year of Concert Choir and instructor approval*
Duration	*1 year*
Units of Credit	*1*

This course will focus on performance of advanced choral repertoire from a wide variety of world cultures and historical periods. The focus will be on singing four-part harmony in a small group setting. A capella literature and polyphonic singing will be emphasized. The course will also seek to develop the individual solo voice. Singers must be comfortable holding a part in the midst of close harmonies. Experience in vocal independence, harmonization ability, and sight singing is necessary to succeed in the course. Instruction and practice in healthy vocal technique for a solo voice will be given. Students will be required to memorize music quickly. Music theory will be taught in the context of performance literature. Individual and ensemble performance inside and outside the classroom will be integrated into yearly course work. Individual singing tests will be administered regularly. Students will perform in regularly scheduled school concerts in addition to potential other opportunities in the community throughout the year.

Course Sequence Map



Theatre Arts

"*We assemble in a space and divide into two parts, one of which enacts stories for the remainder. We know of no society where this ritual never happens.*"

—Declan Donnellan

Theatre is a ubiquitous, multi-varied, and essential form of human expression. In the Theatre Arts courses we explore both the conceptual and practical elements of Theatre through real-world performance and design projects.

Theatre 9 & 10

Prerequisite	*None*
Duration	*1 year*
Units of Credit	*1*

Theatre 9 & 10 provides students with a practical grounding in theatrical techniques and skills across a broad range of disciplines. Students who take both years of the course will cover aspects of acting and performance, directing, devising original works, theatrical design, and technical theatre. Through practical theatre projects, students will develop skills of planning, communication and collaboration.

Theatre 9 & 10 is offered on a two-year rotating cycle. Students can join in either year, and continue for all or part of the two-year curriculum.

Theatre 11 & 12 / IB Theatre

Prerequisite	*None*
Duration	*1 year*
Units of Credit	*1*

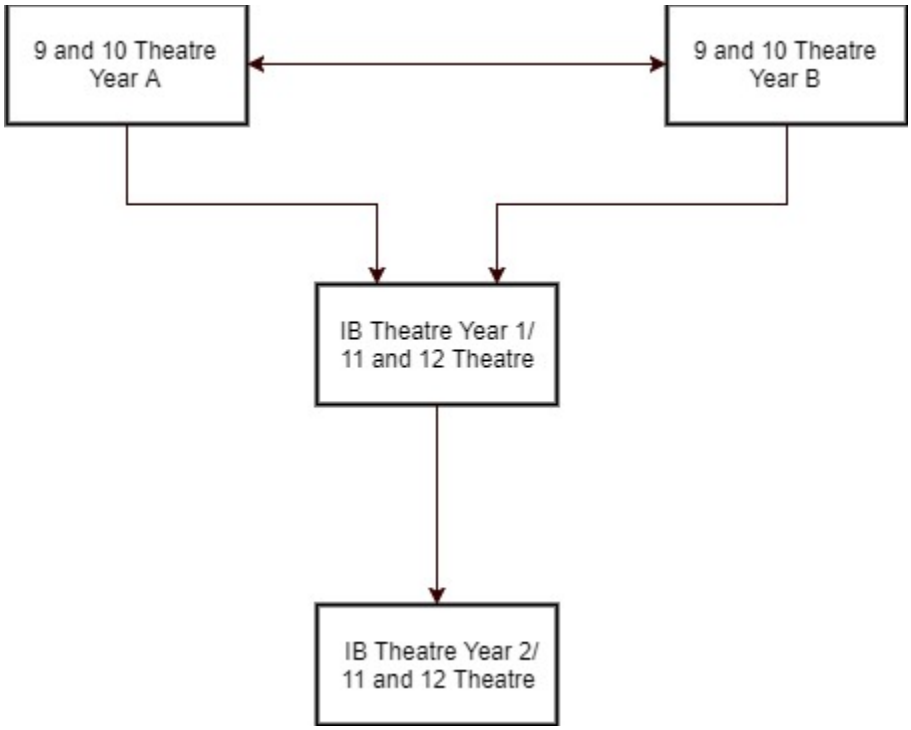
In this course, we will explore one major question: "what is theatre?" To try and find an answer, students will experience unfamiliar theatrical forms, examine the ideas of theatre makers, and undertake practical work to create original performances.

All students will complete three major assessments: creating and performing an original piece of devised theatre with a small group, presenting research into an unfamiliar theatrical form, and a director's notebook of ideas for staging a published play. IB students taking Theatre at the Higher Level will also create a solo performance based on research into a theatre practitioner. *At the end of this IB course students will be prepared and required to take the IB Theatre Exam.*

Theatre for 11th and 12th graders will be delivered on the IB Theatre framework. Students are encouraged to take the course as part of their IB Diploma or

Certificate candidacy. Students joining for one year, or otherwise uninterested in IB credit, can take the course for AISC credit with modified assessment criteria.

Course Sequence Map



Visual Arts

Studio Art (2D-Core, 3D-Core)

The main objective of this course is to provide students with an authentic, studio-based art learning experience that is personalized, flexible and supported.

Throughout the year, students will choose to explore and investigate art media and forms including, but not limited to: sculpture and ceramics, traditional drawing and painting, and lens-based digital media. Students will learn how to use the elements of art and principles of design to develop artwork for personal expression.

The course is a project- and portfolio-based class in which students will be exposed to multiple genres of artwork, art history and artists. Investigation books, teacher- and student-led workshops, as well as individual and class critiques will support the development of their work.

To facilitate learning students will be required to designate their initial preferred core art making form--2D or 3D-- during course registration. This data will enable us to place each student in the appropriate core studio space so that we can best support their identified focus.

A student's designated core preference will not limit their options moving forward, it should be considered a starting point. Throughout the year, all students will be supported in various media and art making forms outside of their core selection if they choose. All students will have access to both 2D and 3D studios, enabling them to: attend crossover workshops, work on non-core projects, attend crossover critiques and collaborate with other artists.

This course can be taken multiple times and students should register for the appropriate level based on the number of semesters of art they have previously completed. For example, a student who has taken two semesters (1 year) of art should register for Studio Art 3/4 while a student who has taken four semesters (2 years) of art should register for Studio Art 5/6. As the program is individualized, students who have not yet taken a high school art course should register for Studio Art 1/2.

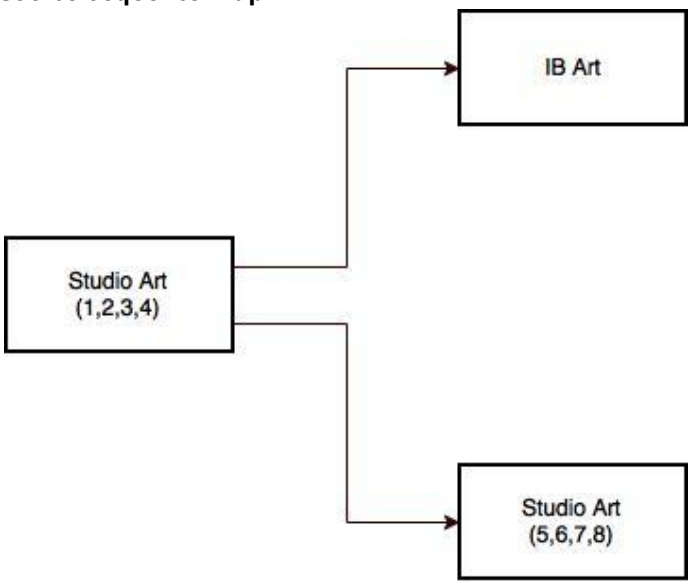
While students can select taking only one semester of Studio Art, it is highly recommended that students register for two sequential semesters in the same year (e.g.: Studio Art 1 & 2).

IB Art HL/SL

Required	*Instructor approval based on portfolio review*
Suggested	*2 art credits*
Duration	*2 years*
Units of Credit	*2*

This course aims to create an understanding, tolerance and respect of self and others through studying international artwork, styles and history including contemporary works along with studio work. Students will develop a "process portfolio" that includes: analytical research, discovery, interpretation and media experiments. These may include responses to articles, reports from gallery/museum visits, photos, photocopies, magazine clippings, etc. Students will choose which medium they are to work in and ultimately they will have an exhibit to show their work at the end of the program. At the end of this course students will be prepared and required to complete the IB Art SL or HL assessments.

Course Sequence Map



Physical and Health Education

In physical and health education we provide students with a unique opportunity to display their creativity, compassion, courage, and confidence in a safe environment--beyond the classroom. Our main objective is to guide students in understanding the importance of valuing physical activity for its contribution to a healthy lifestyle and enhancing their health beyond the school. Interpersonal skills such as demonstrating respect, offering positive feedback, demonstrating responsible behavior in terms of physical and emotional safety are essential for success in PE

This model allows students to explore a variety of possible lifelong health enhancing pursuits.

Health
(offered each semester per year)

Prerequisite	*None*
Duration	*1 semester*
Units of Credit	*0.5*

Health class will focus on delivering American Center for Disease Control National Health Education Standards to students. Course content aims to teach skills in awareness and decision making towards healthy behaviors, finding reliable and relevant health information and services, analyzing external factors that influence health and practicing mindfulness. Units covered in Health include mental health and wellbeing, substance use and abuse, sexuality and relationships, basic first aid and violence prevention. The final summative is a passion project where student dive deeper in a unit topic of their choice to further their understanding and uncover new ideas. The Health course is designed to be taken before 11th grade, though any student without a health credit must take the class to graduate.

Yoga and Rhythmic Movement
(offered each semester per year)

Prerequisite	*None*
Duration	*1 semester*
Units of Credit	*0.5*

This Physical Education course will provide students the opportunity for self-expansion, empowerment, and exploration through yoga and rhythmic movement. The major theme of this course is to provide students with skills and opportunities to create summative performances using yoga and rhythmic movement individually, in

small groups and as a whole class. Rhythmic movement is a combination of modern dance, as well as skills involving ribbon dance and other dance genres that are used to evoke the exploration of dynamic, flowing, and sequential movements. Hatha yoga is a branch of Yoga that uses physical poses, breathing techniques, and meditation to achieve better health for both mind and body. This class will work toward developing an appreciation for lifelong individual fitness focusing on the exploration through dance and yoga.

Adventure Activities
(offered each semester per year)

Prerequisite	*None*
Duration	*1 semester*
Units of Credit	*0.5*

The Adventure Activities class will help instill courage and confidence in participants through a variety of active and classroom learning methods. Topics include; camp craft, water pursuits, rock climbing and rappelling, expedition planning and an adventure race. Students will also learn group
dynamic skills and opportunities to lead their peers in a variety of group initiatives. Students will learn to apply survival skills such as fire and shelter building, rope lashing and wilderness survival scenarios on campus. Students will demonstrate their camp craft skills learnt in the semester and participate an overnight expedition outside. The overnight expedition will include a small additional cost.

Recreational Games
(offered alternative years; available in 18/19)

Prerequisite	*None*
Duration	*1 semester*
Units of Credit	*0.5*

The Recreational Games class values participation over competition in a variety of athletic activities. Participants will recognize the value of physical activity for health, enjoyment, challenge, self-expression and social interaction. Activities may include frisbee and frisbee golf, archery, martial arts, slackline, bocce and local games.

Personal Fitness for Men or Women
(offered each semester per year)

Prerequisite	*None*
Duration	*1 semester*
Units of Credit	*0.5 - may be repeated for credit*

The Personal Fitness class is provided in two separate sections; one for mixed gender and one for women. The class provides an environment that develops physical, mental, and social awareness to achieve a lifetime of physical activity.
The major theme of this course is to provide a broad based fitness experience that teaches the fundamentals and techniques of gymnastic, traditional cardio and weight training. Students will be expected to show progress in pursuit of mastery of key movements while increasing overall fitness through regular benchmarking of achievement.The value of movement in a balanced lifestyle is emphasised and students will take the key concepts learned and be able to implement a personally tailored approach to their own lifelong physical goals. Students will also learn the role of nutrition for performance, digestive health and/or physical change.

Can be taken at any time but each student must take the class to graduate.

Endurance Training
(offered one semester per year)

Prerequisite	*None*
Duration	*1 semester*
Units of Credit	*0.5*

Endurance training class will focus on developing the components of fitness that most affect endurance activities. This course will be designed to prepare for activities or events that require sustained aerobic effort. Students will be measuring their endurance training regularly with heart rate monitors, benchmark tests and fitness logs. The events that will take place in the endurance training could be the Raptor-Thon, 5k and 10K, and opportunities to compete in local competitions around Chennai. The class will work toward developing an appreciation for training programs and a lifelong pursuit of endurance fitness activities.
Students will develop knowledge, understanding and performance of key fitness skills related to endurance activities. Cardiovascular and muscular endurance (stamina) will be the focus along with auxiliary skills of strength, power and flexibility. In addition to physical skills, students will also develop an awareness of the role of how nutrition and rest affects training and many other factors that contribute to personal wellness.

Basketball/Soccer/Volleyball for Women or Men
(offered alternative years; available in 18/19)

Prerequisite	*None*
Duration	*1 semester*
Units of Credit	*0.5*

The Basketball/Soccer/Volleyball class is provided in two separate sections; one mixed gender and one for women. This course will be designed for one who enjoys participating in 3 of the traditional SAISA sports which are offered at AISC. The units will be designed to explore the skills, movements and strategies for each specific sport. Students will work individually and together as a team in various games and tournaments. The class will work toward developing an appreciation for training programs, lifelong fitness surrounding basketball, soccer and volleyball. Students will be expected to demonstrate competency in these areas as well as to apply knowledge of concepts, principles, strategies and tactics related to basketball, soccer, and volleyball performance.

Racquet and Batting Sports
(offered alternative years; available in 19/20)

Prerequisite	*None*
Duration	*1 semester*
Units of Credit	*0.5*

The Racquet and Batting Sports class is a one semester class that will focus on a variety of activities which may include softball/baseball, cricket, badminton, tennis, table tennis and other related sports. Students will identify and further develop the specific physical and game components of racquet and batting sports, leading to increased levels of performance. They will apply their knowledge of these components, together with rules, strategies and tactics related to racquet and batting activities.

Information and Design Technology

The Information and Design Technology Department at AISC is dedicated to offering a program that provides opportunities for study and creativity within a context that will stimulate and challenge students developing the skills necessary for independent and lifelong learning. The courses will be focused on developing the students on Design Thinking, Problem Solving, Coding with Logic, Learning through Tinkering and Making. The aim of the courses is to make the students become aware of how computer scientists and design engineers work and communicate with each other and with the client for whom they develop the products. The teachers act as facilitators assisting students in the process of successful development and implementation of IT and design solutions. The programs enable students to apply and use a body of knowledge, methods and techniques that characterize computer science and design technology.

Introduction to Design Technology

Prerequisite	*None*
Length of course	*1 Semester*
Units of Credit	*0.5*

Introduction to Design Technology is a hands-on, project-based course where students design and create functional products using the design thinking process. Students will develop design drawing skills, basic hand tool, power tool and material skills in order to design and create a product.

A major emphasis is on the active involvement of the students in designing and producing real world applications, i.e. small functional products, furniture, jewelry boxes, desk organizers, etc. Topics covered include: safety, engineering drawing, hand and power tools, materials and laser cutting, 3D printing and computer aided design (CAD and CAM).

Engineering Design 1

Prerequisite	*Introduction to Design Technology or 8th Grade Design Technology*
Length of course	*1 Semester*
Units of Credit	*0.5*

This is the second level Design course, designed to give students deeper knowledge, skill and experience with product and engineering design using the design thinking process. The students will be given a variety of engineering challenges to solve with a product solution. Students will use both hand-drawn and CAD drawings to develop their ideas in designing functional products using a variety of tools, materials and equipment. The main project for this course will be designing a product for a client using the tools and concepts in structural, electrical/electronics and mechanical engineering.

Engineering Design II

Prerequisite	*Engineering Design I*
Length of course	*1 Semester*
Units of Credit	*0.5*

This is an advanced Design course offered to give students an opportunity to further build onto their previous Design experience by being challenged to advance their skills in engineering design, creative problem-solving, CAD drawing as well as use of hand- and machine-tool skills. This will be a project based course using the design thinking process to create prototype projects using a variety of techniques, materials, tools and equipment.

Mobile Application Development

Prerequisite	*None*
Length of course	*1 semester*
Units of Credit	*0.5*

Mobile Application Development course introduces students to the concept and applications of Mobile Computing Principles. It uses the visual programming languages and platforms such as MIT App Inventor and AppLab to provide a rigorous, programming-based introduction to computer science using a project-based curriculum. Students learn computer science by building socially useful mobile apps. In this way, student learning will be associated closely with their interests and grounded in their schools, their homes, and their communities. Students who have the pre-knowledge of programming language can move to the next level of App Development using Java for Android Mobile Apps, and Swift for IOS devices.

AP Computer Science A

Prerequisite	*Introductory Programming Modules*
Duration	*1 year*
Units of Credit	*1*

The AP Computer Science A course is an advanced course in computer science which prepares the students to take up the AP Computer Science Examination conducted by College Board. This course covers the fundamentals of Java programming, such as the significance of object-oriented programming and the steps to create simple Java programs. Students taking this course will have hands-on experience learning object-oriented concepts such as inheritance, encapsulation and abstraction. They learn how to create and use Java classes containing arrays, loops, and conditional constructs. They also learn to use and manipulate object references, and to write error handling code. The course provides a solid understanding of what the Java platform is and how it is used in real world applications. At the same time, the design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. The course has 20 hours of compulsory Lab components which needs to be completed by the students. In addition, the responsible use of these systems is an integral part of the course. *At the end of this course students will be prepared and required to take the AP Computer Science A exam.*

IB Computer Science SL

Prerequisite	*Introductory Programming Modules*
Duration	*1 year*
Units of Credit	*1*

The IB computer science course is a rigorous and practical problem-solving discipline. This is a 1 year course which will be taught together with AP Computer Science. The course requires an understanding of the fundamental concepts of

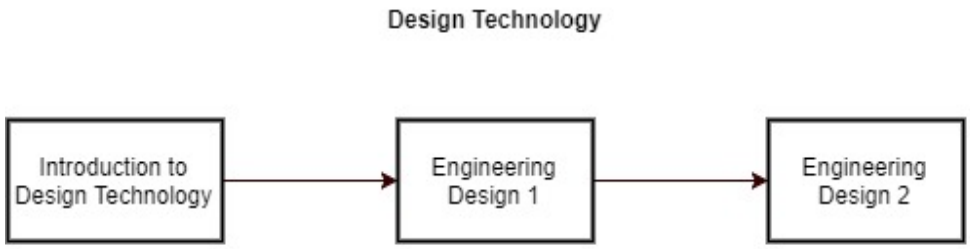
computational thinking as well as knowledge of how computers and other digital devices operate. During the course the student will develop computational solutions.

This will include 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.

To begin, students will learn four topics (system fundamentals, computer organization, networks and computational thinking, problem-solving and programming) along with one option (chosen from databases, modeling and simulation, web science or object-oriented programming) and will have one piece of internally assessed work which includes a computational solution. *At the end of this course students will be prepared and required to take the IB Computer Science A exam.*

Course Sequence Map



Learning Support Services

Learning 2 Learn

Length of course *1 semester or year-long*
Units of Credit *0.25 per semester*

Starting a new course can be daunting, as we can often doubt our ability and skills in learning. Fortunately, learning can be improved by the development of new personal study skills and practices. This course gives the student the opportunity to understand how to learn effectively, teaches the fundamental skills necessary to improve learning and performance and helps students achieve both academic and personal success. This course will borrow heavily from the work of Barbara Oakley on Learning how to Learn through Coursera at University of California, San Diego. The topics covered include executive functioning skills, good academic practice, and

specific individual academic skills that are tailored to the individual needs of the student. There will also be opportunities for students to work on their core classwork with the application of new routines. This course is ideal for preparing prospective students for life as a university student and for life-long learners working in businesses and organizations.

Other Courses

Yearbook

Prerequisite	*None*
Duration	*1 year*
Units of Credit	*1*

Yearbook is a year-long, elective course. The major responsibility of the yearbook student staff is to produce a memorable school yearbook. Student staff work collaboratively and incorporate personal creativity, art, computer technology and desktop publishing skills under the guidance and instruction of an advisor to produce a book that covers our entire school's day-to-day operations as well as major events in the school life of our student population ranging from our Early Years classrooms to our graduating seniors as well as our many staff and faculty that make up our AISC family.

Student staff are assessed using standardized rubrics on each of their page spreads using 9-12 Common Core English Language Arts Standards. Each spread receives a series of formative scores for each minor deadline and a summative score for each major deadline. Students are encouraged to redo or improve their pages based on the feedback received from the formative assessments.

Yearbook is a course that may be retaken more than once for credit. Students who choose this growth opportunity do so in order to have a leadership role as a Yearbook Editor-in-Chief. A Yearbook Editor-in-Chief is expected to meet the same deadlines and standards as his or her fellow student staff members, but is also tasked with more crucial roles such as developing theme, designing layouts, and assisting in the communication between the yearbook student staff and school faculty, student body, publisher support, and school administration.

Passion Project Personalized Learning

Prerequisite	*None, open only to 11th and 12th grade students*
Duration	*one semester or full year*
Units of Credit	*0.5 or 1*

The Passion Project is a course in which students can investigate and take social action in an area of their own interest. This is done by utilizing a "design thinking"

framework to address the real-world problem or concern. Unlike a traditional independent study, students will adjust their course goals as they explore their identified issue and will propose their final assessment as they work through defining, researching, developing, implementing and reflecting on solutions for their issue.

Students will work with the Passion Project Coordinator to identify a project large enough in scope to require design thinking and planning but narrow enough so that real life solutions can be both created and implemented. Students will then identify a content mentor to provide additional content-specific help. This mentor may or may not be a member of the AISC faculty.

While students will work independently, the Passion Project coordinator will guide them through the design process. Students will track their progress through an electronic portfolio which will include artifacts of their research and experimentation as well as reflective writing along the way. A final assessment appropriate to the project will be determined by the coordinator and student.

Academic Personalized Learning

Prerequisite	*None, open only to 11th and 12th grade students*
Duration	*one semester or full year*
Units of Credit	*0.5 or 1*

Academic Personalized Learning (APL) offers Grade 11 and 12 students the opportunity to do independent research and study in an area of the curriculum that is of special interest to them. It involves in-depth, organized study and learning and requires a high level of maturity and persistence. Typically students further explore a topic not covered in desirable depth in a course or subject area. It is not intended as an alternate means of gaining credit for coursework already offered in the AISC curriculum or as a substitute for credit required for graduation, or as a substitute for a class offered by our online providers.

All Academic Personalized Learning projects must be supervised by AISC faculty members. Students interested in pursuing an APL program must first consult with the High School Counselor and the collaborating teacher before applying. Following initial approval, an APL proposal must be submitted to the Associate Principal. The proposal must specify the procedures and requirements of the APL program. The collaborating teacher will be responsible for determining the student's grade for the study. An 11th or 12th grade student undertaking an APL project must be enrolled in at least six courses in addition to the independent study.

Online Personalized Learning

Prerequisite	*Open only to 11th and 12th grade students* (additional prerequisites as per selected online course)
Duration	*one semester or full year*
Units of Credit	*0.5 or 1*

Taking an online course from an AISC-recognized provider offers Grade 11 and 12 students the opportunity to access a curriculum not offered at AISC for fully transferable credit and marks. Such courses are not intended as an alternate means of gaining credit for course work already offered in the AISC curriculum or as a substitute for credit required for graduation. Availing of an online course requires a great deal of independence and responsibility and while an online coordinator will be present to help troubleshoot technical issues and interface with the provider and support student skills and success, students are required to approach their work and communication with their online teacher in a proactive manner.

Currently AISC recognizes three online providers: The Global Online Academy (GOA), Pamoja and K-12. Each offers different types of courses and learning experience and typically require 5 - 7 hours of work per week, which will require work outside of allotted class time.

For all online courses:
An 11th or 12th grade student taking an online course must be enrolled in at least six courses in addition to the online course, unless the online course is a core course, which is allowed only in unique circumstances.

- The course will be timetabled into the student's schedule.
- Only one online course may be taken per semester, except under special circumstances.
- Students and families are responsible for paying for course tuition and required materials. Please speak to the online learning coordinator for cost.
- Students who take online courses from our providers will receive AISC credit..
- All online courses from our providers will show on the transcript as "Online Course." Thus, an official transcript from the online provider will be included with your AISC transcript.
- GOA and Pamoja courses run from September -December and January - May; K-12 AP courses run August - May and January - May

GOA courses: General Interest elective courses offered by The Global Online Academy

The Global Online Academy (GOA) delivers intellectually rigorous courses for high school students in a virtual learning environment. GOA maintains excellence through comprehensive teacher training, building on the best practices and by ensuring classrooms stay at a small size that fosters strong teacher-student relationships and student-to-student collaboration and interaction. A variety of topics are offered in a platform which encourages students to collaborate with peers around the globe, improving learning and enabling the pursuit of individual passions. GOA describes their courses as "*interactive, instructional, and experiential [which include] asynchronous components (students participate each day on their own schedule) and synchronous components (when students collaborate together or work with their teacher, generally using video conferencing software)*."

AISC students can take GOA courses (click here for offerings) for elective credit. GOA course workload and intensity is equivalent to courses taken on our campus. Students collaborate on challenging and interesting projects with others from diverse backgrounds. They are also expected to manage their workload and time effectively to support the synchronous and asynchronous nature of the courses. See Here for successful online learning strategies.

GOA Classes at AISC

- GOA students should expect to work five to seven hours per week in these classes.
- GOA courses are electives and do not substitute for a course required for graduation at AISC.
- GOA has limits on the number of students from a school allowed to enroll per course. AISC students are limited to one GOA course per semester.
- Juniors and seniors are eligible to enroll in GOA classes..

Advanced Placement and International Baccalaureate Courses offered by K12 and Pamoja

If students are interested in AP or IB classes not offered at AISC or experience a conflict in their schedule, they may take an online course designed by providers approved by AISC. K12's International iCademy offers a wide variety of AP courses, some semester long and some year-long. Students preferring to pursue IB online courses can attend classes offered by Pamoja Education. Students

registering for AP classes with K-12 or IB classes with Pamoja are subject to the providers' prerequisites.

Online AP and IB Courses at AISC

- K12 and Pamoja courses are regular classes and cannot be taken in addition to a full load at AISC. Students should expect to work on their courses daily, up to 10 hours per week.
- K-12 AP and Pamoja IB courses may be applied as core class/required class credit depending upon the circumstance.
- Families will be billed for the cost of the online course for the student unless the course is necessary to resolve a schedule conflict beyond the student's control. Should an AP or IB course not be scheduled at all due to insufficient enrollment, students can avail of the course online at their own expense.
- Exams required: Students taking AP and IB online courses must sit the external examination in May.

Notes:

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