



# International School of Western Australia

EDUCATING GLOBAL CITIZENS



## Secondary School Course Handbook



**SECONDARY SCHOOL COURSE HANDBOOK 2021 - 2022**

**CONTENTS**

---

Page 3	Purpose and Vision
Page 4	Introduction
Page 5	Learner Profile
Page 6	Year 7 – 10 Curriculum Information
Page 9	ISWA Graduation Requirements
Page 10	Year 11 and Year 12 course descriptors – Diploma Programme subjects
Page 20	Year 11 and Year 12 course descriptors – Advanced Placement
Page 24	Year 11 and Year 12 course descriptors – High School (stand-alone courses)



## Our School

The International School of Western Australia is a coeducational, non-denominational independent school situated in Perth and with a global reach. We support the growth and achievement of children from families who desire a unique boutique education that is characterised by an experience of excellence and student voice within an internationally minded, open minded and culturally minded 21<sup>st</sup> century learning community.

## Our Purpose

At the International School of Western Australia, we inspire and challenge our students to achieve personal excellence, to pursue a passion for learning, and to be responsible global citizens who take the initiative to make a positive difference in the world.

## Our Values

International Mindedness: Seeing and experiencing the world broadly with perspective.

Open Mindedness: Stepping into the future and embracing opportunities with courage.

Cultural Mindedness: Inviting and acknowledging people on our journey with appreciation.

## Our Vision

Our international curriculum, holistic education, and excellent academic results prepare our students for further studies around the world and position ISWA as a well-recognised and sought after international school.

Our growing, energetic, and enthusiastic international community of students, teachers, and parents all work together to provide a balanced learning environment that nurtures inclusivity, inquiry and responsible risk taking.

Our warmth of welcome allows students and parents to quickly develop a strong sense of belonging to our school community where cultural diversity is celebrated.



## Our Vision

Equipped with competencies of citizenship and character, they travel the world in search of new and authentic learning through which they will grow and contribute within their different communities in a principled and caring fashion throughout their lives.

Empowered by competencies of change readiness and critical and creative thinking, they look forward, recognise and reflect on what is known and what might be possible and pursue new pathways and challenges.

Enabled by competencies of communication and collaboration, they speak more than one language, adapt to their circumstances, and work together with respect for themselves and the customs and beliefs of those around them.

## Introduction

This handbook contains introductory information for students as they prepare to make subject choices for their secondary school years. The information will be supplemented through presentations by staff and through the interview process with students and their families prior to confirmation of subject choices. The date for the secondary school subject selection evening is Monday 13th February 2017. Further details of the evening will be provided closer to the date.

If students have specific queries about a particular subject which have not been answered in this handbook, they should inquire directly to the current teacher of that subject.

Specific information regarding the program requirements of AP and DP courses for Years 11 and 12 can be obtained from the school's AP and DP Coordinators, and will be provided at the Secondary School Subject Selection Evening.



## Our Learner Profile

*(Adopted from the International Baccalaureate)*

Our learners strive for personal excellence and to be:

### Inquirers

They develop their natural curiosity. They acquire the skills necessary to conduct inquiry and research and show independence in learning. They actively enjoy learning and this love of learning will be sustained throughout their lives.

### Open-minded

They understand and appreciate their own cultures and personal histories, and are open to the perspectives, values and traditions of other individuals and communities. They are accustomed to seeking and evaluating a range of points of view and are willing to grow from the experience.

### Knowledgeable

They explore concepts, ideas and issues that have local and global significance. In so doing, they acquire in-depth knowledge and develop understanding across a broad and balanced range of disciplines.

### Caring

They show empathy, compassion and respect towards the needs and feelings of others. They have a personal commitment to service, and act to make a positive difference to the lives of others and to the environment.

### Thinkers

They exercise initiative in applying thinking skills critically and creatively to recognise and approach complex problems, and make reasoned, ethical decisions.

### Risk-takers

They approach unfamiliar situations and uncertainty with courage and forethought and have the independence of spirit to explore new roles, ideas and strategies. They are brave and articulate in defending their beliefs.

### Communicators

They understand and express ideas and information confidently and creatively in more than one language and in a variety of modes of communication. They work effectively and willingly in collaboration with others.

### Balanced

They understand the importance of intellectual, physical and emotional balance to achieve personal well-being for themselves and others.

### Principled

They act with integrity and honesty, with a strong sense of fairness, justice and respect for the dignity of the individual, groups and communities. They take responsibility for their own actions and the consequences that accompany them.

### Reflective

They give thoughtful consideration to their own learning and experience. They are able to assess and understand their strengths and limitations in order to support their learning and personal development.

## Year 7 – 10 (Middle Years Programme) Curriculum Information

### Curriculum

The curriculum content from Year 7 - 10 is outlined by the Australian Curriculum and the Western Australian School Curriculum and Standards Authority (SCSA).

The philosophy, teaching and learning approaches and assessments are outlined by the International Baccalaureate Middle Years Programme (MYP).

### Teaching and Learning Approaches

The Middle Years Programme is a concept driven, inquiry-based framework that promotes a shared practice and standard among IB World Schools offering the MYP. It focuses on connecting classroom pedagogical practices and content to the world outside through the Global Contexts and the Learner Profile.

The MYP Philosophy emphasises holistic learning which exposes students to many different subjects, skills and experiences so students will learn to see knowledge as an interrelated whole. The focus on higher-order thinking skills provides students with opportunities to develop interdisciplinary and intercultural understanding as they explore real-world issues.

The MYP has no bias towards any national system but provides a framework to teach the Australian Curriculum and allow students to progress to Year 11 and 12.

The adoption of the MYP allows the School to continue with the approaches to learning fostered within the PYP (Primary Years Programme) and also contains pedagogical aspects which prepare students for the DP in Years 11 and 12, with the personal project, for example, serving as useful preparation for the extended essay.

### All courses in Years 7-10 are designed to:

- Meet the requirements of the Australian National Curriculum.
- Enable students transferring from ISWA to other international schools, to receive appropriate course credits and a cumulative GPA (Grade Point Average).  
For the purposes of GPA calculation, all courses in Years 7-10 are designated as regular courses with the exception the additional Mathematics electives (Y7-10) and the Year 10 US History and Science elective which are honors courses.
- Enable all students to have the prerequisite skills and knowledge to access, in Years 11 and 12, Advanced Placement courses, the Diploma Programme of the International Baccalaureate or High School courses.
- Enable students to receive the appropriate credits for graduation from the school.

## Eight Learning Areas of MYP

- English – Language, Literature and Literacy
- Languages Other Than English (language acquisition) – French, Spanish
- Humanities and Social Sciences (Individuals and Societies) – Geography, Economics, History, Civics and Citizenship
- Sciences – Chemistry, Biology, Physics, and Earth & Space Sciences
- Mathematics – Number & Algebra, Measurement & Geometry, Statistics & Probability
- Health and Physical Education – Personal, Social & Community Health, Movement & Physical Activity
- The Arts – Visual Arts, Music, Drama
- Technologies (Digital and Design) – Robotics & Coding, Engineering, Dimensional, Media, Graphics, Environmental.

NOTE: technology is integrated within all subject areas through a 1:1 Surface Pro 5

## Additional Courses:

- In Years 7-10, students requiring U.S. mathematics credits have the option to study additional U.S. Mathematics Programmes (Pre-Algebra, Algebra I, Geometry, Algebra II).
- In Year 10, students study a full semester of each Science stream; Semester 1 – Biology and Environmental Design, Semester 2 – Physics and Chemistry
- English As Additional Language tuition is available for non-English native speakers

## MYP Electives

- Year 7 offers choice of public speaking, music, digital design and pre-algebra
- Year 8 offers choice of debating, drama and algebra I
- Year 9 offers choice of model united nations, visual art and geometry
- Year 10 offers choice of careers in energy, marine studies, music, visual art and algebra II

## Timetable

- The timetable allocates 8x 40-minute periods per day.
- The five core subjects of English, Mathematics, Science, Languages and Humanities and Social Sciences are allocated 5 x 40-minute periods per week.
- Health and Physical Education are allocated 4x 40-minute periods per week.
- The Arts, Technologies and Electives are allocated 3x 40-minute periods per week.
- Homeroom is allocated 2x 40-minute periods per week and 5x 10-minute sessions per day.



## Personal Project (Year 10)

In Year 10, students complete a Personal Project. This is an independently created piece of work that encourages experiential learning. The Personal Project consists of three assessable components:

1. A product / outcome.
2. A process journal documenting the journey in creating the product.
3. A written report.

In total, students are expected to spend approximately 25 hours on their Personal Project. This includes meeting with assigned mentors, as well as independent learning through research.

## Year 11 and 12

Students in Years 11 and 12 will study six subjects each year. Students entering Year 11 are presented with three options:

- International Baccalaureate Diploma Programme
- US College Board Advanced Placement
- High School Certificate

### Academic Pathways

Both the Diploma Programme and the Advanced Placement courses provide students with academic challenge and are excellent preparation for tertiary studies. When choosing between the two, students need to consider their likely university/college destination after leaving school, and the extent to which either the DP or the AP might better suit their needs.

The DP is a two-year learning experience with a strong focus on independent study, where all major assessment tasks are in the second year of the program. The DP requires students to engage in activities beyond the classroom. AP courses can be taken in either Year 11 or Year 12 and prepare students for exams at the end of either year.

### Graduation Requirements

In order to graduate, students are required to complete 25 credits. One credit is awarded for each full year of a course that students complete with a passing grade of D- or better. It is important students ensure their subject choices will meet graduation requirements. Course credit already achieved at a previous school will be accepted by ISWA on receipt of official documentation from the issuing school.

### Credit Allocation for Graduation

SUBJECT	CREDIT
English	4
Mathematics	3
Sciences	2
Humanities and Social Sciences	2
Languages (Spanish or French)	2
Visual Art	1
Electives	1
Physical Education & Health	2
Year 11 & 12 Courses	4-6
Service	1

## Year 11 and 12 Course Descriptors

### Diploma Programme courses (including concurrent HS courses)

The DP (Diploma Programme) is a two-year course of study that gives students access to all major universities in the world. It combines a rigorous academic program of study with a focus on developing attributes and skills beyond academic study, including a community service component. Universities and colleges around the world are increasingly keen to enrol DP students (with many offering scholarships). Further information should be sought through contact with admissions officers at specific universities or through reference to university information placed on the IB's website at <http://www.ibo.org/recognition/university/>

As the DP program is a two-year course of study, HS students are encouraged to commit to two years of each subject wherever possible.

Students opting for the full Diploma Programme are required to choose three Higher Level and three Standard Level subjects.

All DP students are also required to take a critical thinking course (TOK – Theory of Knowledge), complete an Extended Essay and take part in a variety of CAS (Creativity, Action, Service) activities throughout the two years of the program.

#### Group 1 – English

ENGLISH A LANGUAGE and LITERATURE HL & SL

#### Group 2 – Language Other Than English

SPANISH B HL & SL or SPANISH ab initio (beginner) SL

FRENCH B HL & SL or FRENCH ab initio (beginner) SL

#### Group 3 – Individuals and Societies

ECONOMICS HL & SL

HISTORY HL & SL

#### Group 4 – Science

BIOLOGY HL & SL

CHEMISTRY HL & SL

PHYSICS HL & SL

ENVIRONMENTAL SYSTEMS and SOCIETIES SL & HL



### Group 5 – Mathematics

MATHEMATICS ANALYSIS and APPROACHES HL & SL  
MATHEMATICAL APPLICATIONS and INTERPRETATIONS HL & SL

### Group 6 – The Arts

VISUAL ARTS HL & SL  
THEATRE HL & SL

## Diploma Programme Course Descriptors

### Group 1 – English

#### Language and Literature, *Higher and Standard Level*

Language and Literature is designed to encourage students to question the meaning generated by language and texts, which are by nature ambiguous. The course aims to develop in students, skills of textual analysis and the understanding that texts, both literary and non-literary, can be seen as autonomous yet simultaneously related to culturally determined reading practices.

The course is flexible, which means teachers have the opportunity to construct it in a way that reflects the interests and concerns that are relevant to their group of students, whilst developing in students a range of transferable learning skills.

The key idea about Language and Literature is that language is seen in relation to the technical practices that make it such (theme, style characterisation and other stylistic devices) and language is also explored in relation to our culturally defined reading practices, and by the circumstances of production and reception of the text. The study of literature in translation is especially important as it allows students to view the world through other lenses. variety of continents, genres and historical time periods are examined.

The students are generally expected to cover many more texts of all kinds at HL level than at SL.

### Group 2 – Language Other Than English Spanish B, *Higher and Standard Level/HS*

*Pre-requisite:* Successful completion of three years of Spanish.

The Spanish B course is a two-year course which aims to develop students' linguistic abilities through the development of receptive, productive and interactive skills. The Higher Level differs from the Standard Level course in one significant aspect: the reading and study of at least two pieces of literature in Spanish. In the first year the students will also study three topics:

- Global issues
- Communications and media
- Social relationships

Within these topics several aspects of each will be studied. The course comprises an internal assessment component and a three-hour final examination which is assessed externally. Within these topics several aspects of each will be studied in greater depth at Higher Level than at Standard Level and a greater proficiency in the use of the language is expected. The course is conducted in Spanish and students are expected to speak only Spanish in the classroom.



## Spanish ab initio, Standard Level/HS Spanish (beginner level)

The Spanish ab initio (beginner) course is a two-year language acquisition course that seeks to enhance intercultural understanding and foster a concern for global issues in keeping with IB principles. The course is designed for students with little or no prior Spanish language knowledge. While learning in the target language, students become aware of the similarities and differences between their own culture and that of the target language. Language acquisition will be achieved through the development of receptive, productive and interactive skills. Elements of language include vocabulary, grammatical structures, register, pronunciation and intonation. The course is divided into three themes (individual and society, leisure and work, urban and rural environment). Through the study of these interrelated themes, students will develop the skills necessary to fulfil the assessment objectives of the course. In addition, students are strongly encouraged to seek opportunities to use and be exposed to the target language in situations away from the classroom wherever possible. Students will be assessed through external and internal assessment. As part of their external assessment they will complete two examinations (paper 1: receptive skills, paper 2: productive skills), and a written assignment of 200-300 words in the target language carried out in class under teacher supervision. Internal assessment consists of a ten-minute oral examination that is internally assessed and externally moderated by the IB. All assessment takes place towards the end of the course in the second year of study with the first year dedicated to language acquisition.

## French B, Higher and Standard Level/HS French

Pre-requisite: Successful completion of three years of French.

The French B course is a two-year course which aims to develop students' linguistic abilities through the development of receptive, productive and interactive skills. The Higher Level course differs from the Standard Level course in one significant aspect: the reading and study of at least two pieces of literature in French. In the first year the students will also study three topics:

- Global issues
- Communications and media
- Social relationships.

Within these topics several aspects of each will be studied. The course comprises an internal assessment component and a three-hour final examination which is assessed externally. Within these topics several aspects of each will be studied in greater depth at Higher Level than at Standard Level and a greater proficiency in the use of the language is expected. The course is conducted in French and students are expected to speak only French in the classroom.



## Group 3 – Individuals and Society

### Economics, Higher and Standard Level/HS Economics

The study of Economics supports an understanding of the nature of decision-making, our demands for the allocation of scarce resources, the subsequent choices we have to make and how we distribute those resources in order to satisfy human wants. The IB Economics course connects the technical aspects of economic concepts to the realities facing today's world regarding such issues as poverty, environmental problems and national and global security. Topics covered include Microeconomics, Macroeconomics, International Trade, Growth and Development.

Students will be asked to demonstrate knowledge and understanding of current economic issues and data and apply economic concepts and theories to real-world situations. They will also be able to demonstrate the extent to which economic information is used effectively in particular contexts and discuss and evaluate economic information and theories. At the Higher Level student will apply their skills and understanding to set extension topics.

### History, Higher and Standard Level/HS History

The IB History Course at ISWA focuses on the modern era. It is a world history course based on a comparative and multi perspective approach to history. Critical thinking skills are focused around key historical concepts such as; change, causation and significance.

All students at ISWA complete one prescribed unit: Rights and Protests (South Africa in the Apartheid era and US Civil Rights Movement) and two world history topics: Authoritarian States (Case Studies on: Hitler, Stalin and Castro) and The Cold War.

Students studying HL History also complete the HL depth studies for the History of the Americas: The Great Depression and the Americas (mid 1920s–1939), The Cold War and the Americas (1945–1981) and Civil Rights and Social Movements in the Americas (post-1945).

Students studying history are required to evaluate cause and effect by examining issues such as validity, reliability, credibility, certainty and individual, as well as cultural, perspectives.

The Internal Assessment for History allows students to choose a topic of interest from any point in history (10 years ago or older) to conduct a historical research investigation and present a report on their topic using the analysis of both primary and secondary sources.



## Group 4 – Sciences

### Biology, Higher and Standard Level /HS Biology

Biologists have accumulated huge amounts of information about living organisms, and it would be easy to confuse students by teaching large numbers of seemingly unrelated facts. In the Diploma Programme Biology course, it is hoped that students will acquire a limited body of facts and, at the same time, develop broad, general understanding of the principles of the subject. Although the Diploma Programme Biology course at Standard Level (SL) and Higher Level (HL) has been written as a series of discrete statements (for assessment purposes), there are four basic biological concepts that run throughout.

- Structure and function
- Universality versus diversity
- Equilibrium within systems
- Evolution

Students are expected to demonstrate an understanding of, and apply and use, scientific facts and concepts, scientific methods and techniques, scientific terminology and methods of presenting scientific information. They construct, analyze and evaluate hypotheses, scientific methods, techniques and explanations. Students are required to demonstrate the personal skills of cooperation, perseverance and responsibility appropriate for effective scientific investigation and problem solving. They also need to demonstrate the manipulative skills necessary to carry out scientific investigations with precision and safety.

### Chemistry, Higher and Standard Level / HS Chemistry

**Pre-requisites:** The pre-requisites for the IBDP Chemistry course are completion of a one year high school chemistry course, usually HS Chemistry or two years of a general science course with at least a B grade. Students are also required to have successfully completed a high school course in algebra. Previous study of a physics course is desirable, but its absence does not preclude a student from entering the course.

IBDP Chemistry is a two-year course that is intended to be studied by students aiming to complete the International Baccalaureate Diploma. In their first year of study students will cover foundational units in inorganic chemistry. In the second-year students will study further units in inorganic chemistry, a unit of organic chemistry and an optional unit. All students will study the 11 core topics. Higher level students will study the 11 core topics plus extension material for 10 of the core topics.

Completion of IBDP chemistry will prepare students for future studies in subjects such as chemistry, biochemistry, pharmacology, environmental science, geology, medicine and engineering.



Students are expected to demonstrate an understanding of scientific facts, concepts, methods and techniques and to apply and use these in scientific investigation and problem solving. They also need to demonstrate competency in the manipulative skills necessary to carry out scientific investigations with precision and safety. Students will also need to demonstrate the personal skills of cooperation, perseverance and responsibility in their study of this course.

### Physics, Higher and Standard Level /HS Physics

In this course students use the scientific method to learn how scientists work and communicate with each other. It aims to provide, and enable students to apply and use, a body of knowledge, methods and techniques which characterize science and technology. Students develop an ability to analyse, evaluate and synthesize scientific information. The course raises awareness of the moral, ethical, social, economic and environmental implications of using science and technology.

The pre-requisites for the IBDP Physics course are completion of a one-year high school physics course, usually HS 2 Physics with at least a B grade. Students are also required to have successfully completed a high school course in algebra.

IBDP Physics is a two-year course that is intended to be studied by students aiming to complete the International Baccalaureate Diploma. All students will study the 10 core topics. Higher level students will study the 10 core topics plus extension material for 4 of the core topics. All students will be also required to study one option topic.

### Environmental Systems and Societies, Higher and Standard Level

Through studying environmental systems and societies (ES&S) students will be provided with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues. The teaching approach is such that students are allowed to evaluate the scientific, ethical and socio-political aspects of issues.

ES&S is one of two interdisciplinary courses offered in the Diploma Programme, Literature and Performance is the other interdisciplinary course. Students can study this course and have it count as either an individuals and societies or a science course, or both. This gives students the opportunity to study (an) additional subject(s) from any group.

Students will be able to study this course with no specific previous knowledge of science or geography. However, as the course aims to foster an international perspective, awareness of local and global environmental concerns and an understanding of the scientific methods, a student that shares these aims would be good preparation.

During the course, students will study eight different topics. An important aspect of the ES&S course is hands-on work in the laboratory and/or out in the field.



## Group 5 – Mathematics

### Mathematics Applications and Interpretation, Higher and Standard Level

This course is designed for students who enjoy describing the real world and solving practical problems using mathematics, those who are interested in harnessing the power of technology alongside exploring mathematical models and enjoy the more practical side of mathematics.

### Mathematics Analysis and Approaches, Higher and Standard Level

This course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content; it is for students who enjoy developing mathematical arguments, problem solving and exploring real and abstract applications, with and without technology.

## Group 6 – The Arts

### Visual Art Higher, Higher and Standard Level / HS Art

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

The Visual Arts allows students to create artworks across a range of disciplines including: painting, drawing, printmaking, sculpture, fibre art, ceramics, photography, digital media, architecture, graphic design, interior design and textile design.

The Visual Arts syllabus demonstrates a clear distinction between the course at Standard Level and at Higher Level, with additional assessment requirements at HL that allow for breadth and greater depth in the teaching and learning. The assessment tasks require HL students to reflect on how their own work has been influenced by exposure to other artists and for them to experiment in greater depth with additional art-making media, techniques and forms. HL students are encouraged to produce a larger body of resolved works and to demonstrate a deeper consideration of how their resolved works communicate with a potential viewer.



## Theatre, Higher and Standard Level / HS Theatre

The IB Diploma Programme theatre course is a multifaceted theatre-making course of study. It gives students the opportunity to make theatre as creators, designers, directors and performers. It emphasizes the importance of working both individually and collaboratively as part of an ensemble. It offers the opportunity to engage actively in the creative process, transforming ideas into action as inquisitive and productive artists.

Students experience the course from contrasting artistic perspectives. They learn to apply research and theory to inform and to contextualize their work. The theatre course encourages students to appreciate that through the processes of researching, creating, preparing, presenting and critically reflecting on theatre—as participants and audience members—they gain a richer understanding of themselves, their community and the world.

Through the study of theatre, students become aware of their own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices, their processes and their modes of presentation. It enables students to discover and engage with different forms of theatre across time, place and culture and promotes international-mindedness.

## Creativity, Action, Service (CAS)

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

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

## Extended Essay

The extended essay of 4,000 words offers the opportunity for IB students to investigate a topic of special interest, usually one of the student's six DP subjects, and acquaints them with 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 a 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. It is recommended that students follow the completion of the written essay with a short, concluding interview – *viva voce* – with the supervisor. In countries where normally interviews are required prior to acceptance for employment or for a place at university, the Extended Essay was proved to be a valuable stimulus for discussion.



## Theory of Knowledge (TOK)

The interdisciplinary TOK course is designed to develop a coherent approach to learning 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 what 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?

## Online Courses

To supplement the Diploma Programme, ISWA works with the official IB online course provider, Pamoja, to offer online Diploma courses not available in school.

In virtual classes of between 15-25 students from all over the world, online teachers introduce weekly lessons, guide discussion and provide feedback to promote lifelong learning habits. Teachers instruct students using written explanations, screencasts and live sessions, as well as engaging in group and private discussions. Forums and blogs encourage students to reflect on their learning. Online resources support students, and news feeds contextualise subjects within current events. Pamoja's online teachers are always available to help if students have questions.

ISWA teachers can provide extra face-to-face guidance. Students complete the traditional examination papers during the same May examination session as their Diploma peers. More information available at: <http://www.pamojaeducation.com/approach/>

## Advanced Placement Course Descriptors

### Advanced Placement courses (including concurrent HS courses)

AP courses, administered through the College Board in the US, are challenging one-year senior level courses that are valued highly at the tertiary level, particularly in the US. Taking AP courses and exams can improve your chances of getting into US colleges and can also help students reduce college costs. AP courses on your school transcript show colleges that you are capable of learning the knowledge and skills expected of college students, while your AP exam scores provide colleges and universities with additional information about your ability to succeed in college-level study. As with the IB Diploma Programme, taking AP courses can also increase your eligibility for scholarships. Many students choose to take two or three AP courses in Year 11, and another two or three in Year 12.

Students taking AP courses are encouraged to take one or more DP courses to complete their senior years' program of study. Alternatively, they may choose to complete their course selection with HS (High School) courses.

#### Advanced Placement courses:

- AP BIOLOGY
- AP CALCULUS
- AP CHEMISTRY
- AP ENGLISH LANGUAGE & COMPOSITION
- AP ECONOMICS

Please note that, when HS classes run concurrently with AP courses, the course content will be the same for all students. Assessment tasks and assessment criteria, however, may be modified to suit the learning needs of the HS students.

### Online Courses

Students in Years 11 and 12 may take online courses through Virtual High School in the event that there are timetable clashes or courses needed for university entrance are not offered at ISWA. Virtual High School has a wide selection of core, honors, electives, and AP courses available.

Students taking online courses work closely with a VHS Site Coordinator. Students taking AP online courses will sit the AP exam at ISWA in May during the scheduled time by the College Board. The grades and credits received for VHS courses online count towards meeting general graduation requirements and they will be reflected on students transcripts. More information available at: <http://thevhscollaborative.org/>.



## English

### AP and HS English Language and Composition

This introductory college-level course seeks to develop sophisticated reading, writing and grammar skills. Students will read and analyze a range of challenging non-fiction selections that will deepen their awareness of rhetoric and how language works. Course readings feature expository, analytical, personal and argumentative texts from a variety of authors and historical contexts. Students will study essays, letters, speeches, memoirs and autobiographies. In addition to this, students will study the rhetoric of visual media such as photographs, films, documentary and comic strips.

## Individuals and Societies

### AP and HS United States History

AP US History is a university level American History survey course for accelerated scholars of United States history. This course places a heavy emphasis on critical thinking, writing skills and analysis of primary sources. The course will be taught primarily in chronological order while other topics will be discussed thematically. The material covered spans from pre-Columbian Native American societies through the 2012 presidential election. Students will recognise and explain patterns of change and continuity over time and the causes and effects of events and developments. Students identify and explain different points of view in sources. When interpreting sources, they identify their origin and purpose, and distinguish between fact and opinion.

Students will identify the motives and actions of people throughout American history and will also explain the significance of individuals and groups and how they were influenced by the beliefs and values of their society. Students will also describe different interpretations of the past and be introduced to the effects of geography on culture and human settlement in the American hemisphere. Students sequence events and developments within a chronological framework with reference to periods of time. They analyse, select and organise information from primary and secondary sources and use it as evidence to answer inquiry questions.

## AP and HS Economics

The study of Economics supports an understanding of the nature of decision-making, our demands for the allocation of scarce resources, the subsequent choices we have to make and how we distribute those resources in order to satisfy human wants. Economic decisions have a crucial influence on the quality of life experienced by people throughout the world and it is through the choices that individuals, groups and societies make that enable them to improve their quality of life.

The AP Program offers two separate exams in Economics; one in Microeconomics and one in Macroeconomics. The aim of this AP Economics course is to provide the student with a learning experience equivalent to that in a typical university introductory economics course. Each course will be one semester in length with intensive review in the second semester to prepare for both the Microeconomic and Macroeconomic AP exam in May.



## Sciences

### AP and HS Biology

Pre-requisite: Successful completion of HS Chemistry.

Recommended prior learning: Biology 3, Chemistry 3 or AP Chemistry

AP Biology is designed to be as the equivalent of a two semester college Introductory Biology course. After showing themselves to be qualified on the AP exam, some students, in their freshman year of college, are permitted to take upper level courses in Biology or to register for courses that require Biology as a pre-requisite. Other students may have fulfilled a basic degree requirement for a lab-based science course. Biologists have accumulated huge amounts of information about living organisms, and it would be easy to confuse students by teaching large numbers of seemingly unrelated facts. In AP Biology course, it is hoped that students will acquire a limited body of facts and, at the same time, develop broad, general understanding of the concepts of the subject.

The program covers four overarching biological concepts which are known as the 4 Big Ideas:

- The process of evolution drives the diversity and unity of life.
- Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis.
- Living systems store, retrieve, transmit and respond to information essential to life processes.
- Biological systems interact and these systems and their interactions possess complex properties.

### AP and HS Chemistry

Pre-requisite The prerequisites for the AP Chemistry course are completion of a one year high school chemistry course (preferably Chemistry 3D) with at least a B average. Students are also required to have successfully completed a high school course in algebra. Previous study of a physics course is desirable but its absence does not preclude a student from entering the course.

AP Chemistry is a challenging general chemistry course, which requires students to be highly self-motivated. The course aims to give students a good grounding in the basic chemistry principles and an understanding of the scientific process. The course aims to provide students with an experience of experimental work equal to that of a first year college course. It is expected that all students completing the AP Chemistry course will go on to sit the AP exam in May.



## International School of Western Australia

The AP Chemistry course covers 6 Big Ideas as outlined in the AP Chemistry curriculum developed by the College Board;

- Big Idea:
- 1: Structure of Matter
  - 2: Properties of matter- characteristics, states and forces of attraction.
  - 3: Chemical reactions
  - 4: Rates of chemical reactions
  - 5: Thermodynamics
  - 6: Equilibrium

In each of the big ideas the chemistry principles covered in earlier Chemistry courses are briefly summarised and then the concepts extended. Students learn essential concepts through an inquiry-based approach in order to achieve a deeper level of learning. The laboratory program is designed to allow students develop their investigative skills through guided inquiry type experiments. The course aims to provide students with an experience of experimental work equal to that of a first year college course. Students will develop inquiry and reasoning skills, such as experiment design, collecting and processing, applying mathematical routines and connecting concepts.

## Mathematics

### AP and HS Calculus AB

Pre-requisite: Successful completion of Pre-Calculus.

The Calculus AB 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 also are important. Broad concepts and widely applicable methods are emphasized. The focus of the course is neither manipulation nor memorization of an extensive taxonomy of functions, curves, theorems, or problem types. Thus, although facility with manipulation and computational competence are important outcomes, they are not the core of these 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. Through the use of the unifying themes of derivatives, integrals, limits, approximation, and applications and modelling, the course becomes a cohesive whole rather than a collection of unrelated topics.

## High School Stand Alone Courses

High School (HS) courses are internal ISWA courses. They do not have the external validation or the same international recognition of either the International Baccalaureate or the College Board. While HS courses will form part of a student's GPA (Grade Point Average) and will be recorded on a student's transcript which can lead to college entry, they do not carry the same weight as either the Diploma Programme or Advanced Placement courses.

Although some HS courses at ISWA are separate, stand-alone classes, many share their class time with either DP or AP classes. In these cases, teachers will deliver the course content relevant to either the DP or AP class, but will modify the assessment to suit the learning needs of the HS students.

HS students in a combined DP/HS class, particularly if they are likely to take the subject over two years (Year 11 and Year 12) are advised to consider opting to register for the DP course as this will (a) be advantageous for their college entry process, and (b) provide a more challenging and rewarding educational experience.

The course content for DP and HS classes will be the same for all students. Assessment tasks and assessment criteria, however, may be modified to suit the learning needs of the HS students.

### Stand-Alone Courses

- HS APPLIED ART
- HS PRE-CALCULUS (may be combined with a DP course)

### High School courses normally combined with either AP or DP classes in both Years 11 and Year 12

- HS ART
- HS BIOLOGY
- HS CALCULUS
- HS CHEMISTRY
- HS ECONOMICS
- HS ENGLISH LANGUAGE
- HS ENGLISH LITERATURE & LANGUAGE
- HS FRENCH
- HS HISTORY/US HISTORY
- HS MATHEMATICS
- HS MATHEMATICAL STUDIES
- HS PRE-CALCULUS
- HS PHYSICS
- HS SPANISH
- HS THEATRE



## Stand-alone courses HS Pre-Calculus

Recommended prior learning: HS Geometry 1 and HS Algebra 2

The High School Pre-calculus course has been designed to prepare students with the necessary knowledge and skills to be able to complete the High School Calculus or AP Calculus (AB) courses.

Students are equipped primarily with a working knowledge and understanding of mathematical functions and their behaviour, and are encouraged to develop mathematical maturity through more rigorous and precise explorations of familiar mathematical ideas. Topics covered include polynomial, trigonometric, exponential and logarithmic functions, as well as introductions to vectors, complex numbers and some elementary calculus concepts.

The study of mathematics encourages the development of critical thinking skills through the practice of rigorous analysis, precise expression and the application of logic. There are opportunities in the mathematics curriculum to explore, develop and apply ethical understanding in a range of contexts, for example through analysing data and statistics; seeking intentional and accidental distortions; finding inappropriate comparisons and misleading scales when exploring the importance of fair comparison; and interrogating financial claims and sources.

## HS Applied Art

This course is designed for students who seek life enrichment through the visual arts, no matter their level of art experience and ability. Throughout the year, students will have opportunities to further their knowledge, skills and confidence through experimentation, critical investigation, discovery and processes of studio production. Each student will be urged to experiment, take risks and develop their own unique approach to the production of studio works. Students will be exposed to various artworks, styles and themes of local and international artists from different cultures and times, as well as various two and three dimensional technical skills and processes. Students are expected to complete studio works, maintain an investigation workbook, meet project and homework deadlines and participate in the annual ISWA Art Exhibition.