



PRINCE  
ALFRED  
COLLEGE

# Senior School Subject Selection Handbook



# Introduction

At Princes we offer boys across the academic spectrum the opportunity to find their passion and fulfil their potential by providing a knowledge rich, broad, liberal education. The boys are encouraged to learn deeply and develop genuine expertise in the subjects they choose to study. At certain points, when boys have developed sufficient academic maturity, there is the opportunity for them to make informed choices. This academic agency is important in order to satisfy both interest and ambition. It is our expectation, that students make positive choices and fully commit to those choices.

This handbook is divided into four sections:

- Senior School curriculum
- Year 10 subjects
- International Baccalaureate Diploma subjects
- SACE Stage 1 and Stage 2 subjects

Here is some generic advice to students when it comes to academic choice:

**Take time** to evaluate all possible combinations that appeal. Do not be afraid to change your mind a few times during the decision-making process. Likewise, do not go around in circles with your thinking.

**The decision.** There is no such thing as a good or bad decision, merely good or bad outcomes of that decision. Make the decision, and then commit to converting that decision into the best possible outcome. Effort is critical – almost any pathway can lead to a successful outcome if one's effort and application are consistently excellent.

**Thinking before the decision.** Your decision(s) should be borne out of interest and talent. What am I good at, and what do I want to learn more about in future? If you satisfy both criteria with a subject or course, you are almost certain to be rewarded.

A final point, do not abandon your careful thinking at the beginning of the new School year. Some courses start hard and then level off. Others have a gentle lead-in and become more difficult later in the course. The research, the conversations and the thinking you do now is key to decision making, but it is the effort you put in from the start of the academic year that determines whether you will be successful. Avoid employing a tactical approach to courses. There are no short-cuts, and if you are struggling with a course, the one way to guarantee improvement is to work harder at it. Pick courses you enjoy and are likely to suit your talents and ambitions and you will give yourself the best chance of success.

**Martin McKinnon**

**Director of Teaching and Learning**

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# The Year 10 Curriculum

Year 10 subjects continue to create a broad base of knowledge that consolidates past learning and prepares students for future studies. As well as the compulsory subjects, students select electives that begin to shape the studies of their final years at the College. Students are encouraged to select electives that cater for their strengths and interests, but also to be ambitious and ready for challenge. Aspects of Year 10 begin to prepare students for the South Australian Certificate of Education (SACE) and the International Baccalaureate Diploma Programme (IBDP).

Disciplinary knowledge is found in the eight learning areas: English, Mathematics, Science, Humanities, Health and Physical Education, Languages, Performing Arts, and Art, Design & Technology. The latter four learning areas include multiple elective subjects, reflecting custom and practice in the discipline.

All Year 10 students study the SACE PLP (for two terms). This is a prerequisite for SACE completion. The remainder of the year is either supplemented with the Princes Project class, or 10 Advanced Mathematics. 10 Advanced Maths is a prerequisite course for students pursuing IB Mathematics, SACE Mathematical Methods and/or Specialist Mathematics.

## The Year 10 Subject Pattern

The Year 10 subject pattern has been arranged to fulfil College obligations toward the Australian Curriculum, whilst placing high value on academic rigour, intellectual and cultural appreciation, and mastery within individual disciplines. All students will complete compulsory study in the five subjects of English, History, Mathematics, Sciences and the Personal Learning Plan (PLP). Students will then select three further full-year elective subjects across the remaining learning areas of Art, Design & Technology, Health & Physical Education, Humanities, Languages, and Performing Arts.

Students may take the option of 10 Advanced Mathematics in lieu of two terms of the Princes Project.

<b>Terms 1-2</b>	<b>English</b>	<b>Maths</b>	<b>Science</b>	<b>History</b>	<b>PLP / Princes Project (or 10A Maths)</b>	<b>Elective 1</b>	<b>Elective 2</b>	<b>Elective 3</b>
<b>Terms 3-4</b>	<b>English</b>	<b>Maths</b>	<b>Science</b>	<b>History</b>	<b>PLP / Princes Project (or 10A Maths)</b>			



# The International Baccalaureate Diploma Programme



Prince Alfred College has been an IB World School since November 1995.

The International Baccalaureate Organisation (IBO) aims to develop inquiring, knowledgeable and caring young people who can help to create a better and more peaceful world through intercultural understanding and respect. To this end the IB works with schools, governments and international organisations to develop challenging programmes of international education and rigorous assessment.

The International Baccalaureate (IB) Diploma Programme is an engaging two-year curriculum, widely recognised by national and international universities.

Prince Alfred College views the IB Diploma Programme as a means to achieving a number of important College goals, which include:

- Preparing students with the best possible skills and attitudes for success in tertiary studies both nationally and internationally.
- Encouraging the pursuit of academic excellence through an outstanding, broad educational programme within a well-structured framework.
- Encouraging depth and breadth of study and research.
- Promoting the international scope and vision of our School and community.
- Promoting the concept of internationalism and our place in the global community.
- Providing the best possible professional development opportunities for our teachers.
- Receiving frequent and detailed feedback on our educational standards and practices.



## IB learner profile

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

As IB learners we strive to be:

### INQUIRERS

We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

### KNOWLEDGEABLE

We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

### THINKERS

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

### COMMUNICATORS

We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

### PRINCIPLED

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

### OPEN-MINDED

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

### CARING

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

### RISK-TAKERS

We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

### BALANCED

We understand the importance of balancing different aspects of our lives—intellectual, physical, and emotional—to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

### REFLECTIVE

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

The IB learner profile represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help individuals and groups become responsible members of local, national and global communities.



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## Should you choose the IB Diploma Programme (IBDP) at Prince Alfred College?

The IB Diploma is a two-year programme to be completed in the final years of senior schooling, and aims to prepare students for university study and global citizenship better than any other certificate. In particular, the Diploma aims to:

- Prepare students for tertiary studies
- Provide students with a balanced education
- Foster critical thinking skills
- Encourage cultural understanding and tolerance
- Develop international awareness and broadened perspectives

Since its founding, the Diploma Programme has become a world-wide symbol of academic integrity and intellectual promise. Over 1300 schools offer the Diploma Programme to 50,000 students. The student who is awarded the Diploma has demonstrated a strong commitment to learning, both in terms of the mastery of the subject content and in the development of the skills and discipline necessary for success in a competitive world.

A student who aspires to continue with his education post-school and who is motivated and excited to learn is an appropriate Diploma candidate.

The IBDP is an excellent course for you if you wish to study at a university and you are interested in:

- being prepared in the best possible way for success in your university course,
- a sound comprehensive curriculum,
- a curriculum recognised locally, nationally and throughout the world for both **breadth and depth** in academic studies
- activities that encourage a sense of *adventure, self-discipline* and *social responsibility*



## The IB Diploma Programme Model

The IB Diploma curriculum is based on a model, with six academic subject groups surrounding a core. You have to study a subject from each of the groups, balanced with a concurrent involvement in three other fundamental programmes, Extended Essay (EE), Theory of Knowledge (ToK) and Creativity, Activity & Service (CAS).



To be eligible for the award of the IB Diploma, you have to:

1. Study **six subjects**, one from each group with the exception of Group 6 where an additional subject may be studied from Groups 3 or 4.
2. Complete at three of the six subjects at **Higher Level (HL)**, and the remaining three at **Standard Level (SL)**. A selection of SL subjects can be anticipated by invitation. Anticipated subjects are Standard Level subjects that are studied and examined in Year 11. Students will then complete their five remaining subjects in Year 12.
3. Satisfactorily complete the following requirements:
  - Theory of Knowledge (ToK)
  - Extended Essay (EE)
  - Creativity, Activity and Service (CAS)

## **Theory of Knowledge**

The Theory of Knowledge (ToK) requirement is central to the educational philosophy of the IB Diploma Programme. As a thoughtful and purposeful inquiry into different ways of knowing, and into different kinds of knowledge, ToK is composed almost entirely of questions. The most central of these is “How do we know?”

It offers students and their teachers the opportunity to:

- reflect critically on diverse ways of knowing and on areas of knowledge
- consider the role and nature of knowledge in their own culture, in the cultures of others and in the wider world.

In addition, it prompts students to:

- be aware of themselves as thinkers, encouraging them to become more acquainted with the complexity of knowledge
- recognise the need to act responsibly in an increasingly interconnected but uncertain world.

## **Extended Essay**

The extended essay is an independent, self-directed piece of research, culminating in a 4,000-word paper. As a required component, it provides:

- practical preparation for the kinds of undergraduate research required at tertiary level
- an opportunity for students to engage in an in-depth study of a topic of interest within a chosen subject.

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

The CAS requirement is a fundamental part of the programme and takes seriously the importance of life outside the world of scholarship, providing a refreshing counterbalance to academic studies. Students must document 150 hours of activities that are evenly split among creative, activity and service-oriented endeavours. Participation in theatrical and musical activities, bands, sports and community activities enables students to share their special talents and interests with others, while developing awareness, concern and the ability to work cooperatively.

## IB Diploma Subjects offered 2023 - 24\*

<b>Group 1 - Studies in Literature and Language</b>
English A: Literature (SL or HL)
Chinese A: Literature (SL or HL)
<b>Group 2 - Language Acquisition</b>
Chinese B (SL or HL)
English B (HL)
French B (SL or HL)
Italian B (SL)**
Spanish ab initio (SL)
<b>Group 3 - Individuals and Societies</b>
Economics (SL or HL)
Geography (SL or HL)
History (SL or HL)
<b>Group 4 - Experimental Sciences</b>
Biology (SL or HL)
Chemistry (SL or HL)
Design technology (SL or HL)
Physics (SL or HL)
Sports, exercise and health science (SL or HL)
<b>Group 5 - Mathematics</b>
Mathematics: applications and interpretation (SL or HL)
Mathematics: analysis and approaches (SL or HL)
<b>Group 6 – Arts</b>
Music (SL or HL)
Visual arts (SL or HL)
Film (SL or HL)
Theatre (SL or HL) or
Another subject from Group 3 or 4

\* Subject to demand and resources

\*\* Completed in May Examination Session



## The IB Diploma and University Entry

IB Diploma holders gain admission to universities throughout the world. Most Prince Alfred College IB graduates choose Australian universities. Some colleges and universities offer advanced standing or course credit to students with strong IB results.

Diploma students are assigned a notional Australian Tertiary Admissions Rank (ATAR) score awarded on the basis of their Diploma results. This is like the ATAR that SACE students achieve. If you have completed the IB Diploma Programme, your rank will be based on your IB points total, which the South Australian Tertiary Admissions Centre (SATAC) will convert to an ATAR.

Please note, the ATAR is derived from the national conversion table produced by the Australasian Conference of Tertiary Admissions Centres (ACTAC) which is adjusted every year.

Most universities have defined equivalent IBDP prerequisites for their courses. Please see the Careers Counsellor for further details.

### IB Diploma score to ATAR calculation examples

Student A, an Arts/Humanities student, studies the following subjects and receives:

English A HL	French B SL	History HL	Physics SL	Maths SL	Visual Arts HL	ToK/EE
6	6	7	5	6	7	2
					<b>IB Score</b>	<b>39</b>
					<b>ATAR</b>	<b>97.1</b>

Student B, a Mathematics and Science student who is studying the following, receives:

English A SL	Spanish ab initio SL	Economics HL	Physics HL	Maths SL	Chemistry HL	ToK/EE
5	5	6	7	7	7	3
					<b>IB Score</b>	<b>40</b>
					<b>ATAR</b>	<b>97.9</b>

Student C, the Commerce student who is studying the following, receives:

English A HL	French B SL	Economics HL	Biology SL	Maths HL	ESS SL	ToK/EE
5	5	7	6	5	7	2
					<b>IB Score</b>	<b>37</b>
					<b>ATAR</b>	<b>95.2</b>

### **Are some subjects scaled up or down as in the SACE?**

**Note:** Every subject in the IB Diploma is regarded as equal. It does not matter whether you get a 6 in Higher Level Physics or a 6 in Spanish ab initio (Standard Level) – the grades are treated as equal. This means you do not have to choose subjects because you think it will be scaled up. You can choose subjects because you are interested in them.

### **IBDP subject score SACE scaled score equivalents**

<b>IB subject score</b>	<b>Equivalent SACE scaled score</b>
7	19.0
6	18.2
5	16.6
4	14.2
3 (HL only)	12.0

# The South Australian Certificate of Education (SACE)

The South Australian Certificate of Education (SACE) is awarded to students who successfully complete their senior secondary education. Students usually complete their SACE over two years, but may take longer. The SACE is a qualification that paves the way for young people to move from school to work or further training and study.

The certificate is based on two stages of achievement: Stage 1 (normally undertaken in Year 11) and Stage 2 (Year 12).

Each subject or course successfully completed earns 'credits' towards the SACE, with a minimum of 200 credits required for students to gain the certificate.

In addition to earning the 200 points, it is necessary to complete the following compulsory subjects – English and Mathematics at Stage 1, the Personal Learning Plan, the Research Project and a minimum of three Stage 2 subjects.

All Stage 1 students will receive a grade – from A to E – for each subject. For compulsory subjects, they will need to achieve a C grade or better.

The table below illustrates how the minimum 200 points are acquired to achieve the SACE.

Requirements	Credits
<b>Year 10</b> Personal Learning Plan	10
<b>Year 11 (Stage 1) or Year 12 (Stage 2)</b> Literacy (from a range of English subjects and courses) Numeracy (from a range of Mathematics subjects and courses)	20 10
<b>Year 12 (Stage 2)</b> Research Project* Other Stage 2 subjects and courses**	10 60 or more
<b>Year 11 or 12 (Stages 1 or 2)</b> Other subjects and courses of the student's choice	Up to 90
<b>Total</b>	<b>200</b>

\* Students undertake the Research Project in Year 11 at PAC

\*\* Many SACE students complete subjects or courses worth more than the minimum 70 credits at Stage 2. All PAC students undertake **five** subjects/courses in Year 12.



## The SACE at Prince Alfred College

At Prince Alfred College students will study for more than the minimum 200 credits required to achieve the SACE. Students completing the SACE at the College will earn, on average, 230 credits.

The table below illustrates the typical SACE pathway at Prince Alfred College.

<b>Year 10</b>	<i>Personal Learning Plan</i>						
<b>Year 11</b>	<i>Literacy</i>	<i>Numeracy</i>	<i>Research Project</i>	Stage 1 Subject	Stage 1 Subject	Stage 1 Subject	Stage 1 Subject or IBDP Subject or VET
<b>Year 12</b>	Stage 2 Subject	Stage 2 Subject	Stage 2 Subject	Stage 2 Subject	Stage 2 Subject or IBDP Subject or VET		

*Compulsory subject*

Option subject

## University and TAFE entry

TAFE SA recognises the SACE as meeting the entry requirements for most of its courses. It also considers a variety of other qualifications and experiences in its entry and selection processes.

Students who complete the SACE are eligible for university entry, provided they meet certain requirements. For university entry, students need to achieve 90 credits at Stage 2, including the three compulsory 20-credit Stage 2 subjects required for SACE completion.

The Australian Tertiary Admissions Rank (ATAR) is calculated in a variety of ways defined by the universities. This includes, but is not limited to the best 90 TAS points from a student's results.

Universities also specify required subjects for some of their courses.

Full details of university and TAFE entry requirements for 2023 onwards are included in the *Tertiary Entrance Booklet 2022, 2023, 2024*, published online by the South Australian Tertiary Admissions Centre. Go to the SATAC website for more information <http://www.satac.edu.au/satac-publications>

## SACE University aggregate to ATAR calculation examples

Each SACE student receives a University aggregate out of 90, which is then converted to an Australian Tertiary Admission Ranking (ATAR) with a maximum ranking of 99.95.



*From SATAC Tertiary Entrance Guide 2022-2024*

Examples of university aggregate and TAFE SA Selection Score calculations for **2022 entry** (from the SATAC Booklet for Tertiary Entrance) appear on pages 29-31 of the SATAC guide, found here:

<https://www.satac.edu.au/satac-publications>

These examples include typical and atypical subject patterns used to achieve a University aggregate / ATAR from Stage 2 studies. Note the SATAC guide also provides examples of subject patterns that are *ineligible* for University aggregate / ATAR due to non-compliance with rules around precluded subject combinations or counting restrictions.

## **Converting the university aggregate to an Australian Tertiary Admission Rank (ATAR)**

The university aggregate is converted to an ATAR. The ATAR is an indicator of how well a particular student has performed relative to other students. It is calculated as follows:

- The group of students who may qualify for a university aggregate in 2022 is called the 2022 cohort.
- For each university aggregate score (in the range 0-90.0) obtained by the students in this cohort, the percentage of students who obtained that score or better is calculated. This is known as calculating the percentile distribution.
- Each score in the range 0-90.0 now has a corresponding percentile rank in the range 0-100. For example, if a score of 80.4 or better out of 90.0 has been obtained by 10% of the cohort, the score of 80.4 will correspond to a percentile rank of 90.0 (100 – 10).
- The 2022 cohort may differ from that of other years in that it may represent a smaller or larger percentage of the population of the same age group. The percentage from the given year is known as the participation rate. It is calculated using population statistics obtained from the Australian Bureau of Statistics and measuring these against the size of the cohort. If an allowance were not made for this, the final ATAR would not be comparable from one year to the next.
- The percentile rank is then adjusted to take account of the participation rate and the result is the ATAR.



## SACE Stage 1 Subjects offered

Stage 1	
English	Drama
English Literary Studies	Music Advanced
Essential English	Outdoor Education
Accounting	Physical Education
Business Innovation	Biology
Economics	Chemistry
Geography	Physics
History	Design & Technology - CAD
Legal Studies	Design & Technology - Metal
Religion Studies	Design & Technology - Systems/Control
Chinese Background Speakers	Design & Technology - Wood
Essential Mathematics	Visual Arts - Art
General Mathematics	Visual Arts - Design
Mathematical Methods	Vocational Education and Training (VET)
Specialist Mathematics	
SACE students may also elect to study Sports Science, History, Film, Chinese B, French B, Italian B or Spanish ab initio by participating in the relevant Diploma course	

## SACE Stage 2 subjects offered

Stage 2	
English	Music: Studies, Explorations, Performance: Solo and/or Ensemble
English Literary Studies	Outdoor Education
Essential English	Physical Education
Accounting	Biology
Business Innovation	Chemistry
Economics	Physics
Geography	Research Project Studying Year 11 in 2021
Legal Studies	Design & Technology: Communication Products – Computer Aided Design (CAD)
Modern History	Design & Technology: Material Products – Metalwork
Chinese (Background Speakers)	Design & Technology: Material Products – Woodwork
Essential Mathematics	Design & Technology: System & Control Products – Coding & Automation
General Mathematics	Visual Arts: Art
Mathematical Methods	Visual Arts: Design
Specialist Mathematics	Vocational Education and Training (VET)
Drama	
SACE students may also continue to study English B, Sports Science, Geography, History, Film, Chinese B, French B or Spanish ab initio by participating in the relevant Diploma course.	

## **SACE with Vocational Education and Training (VET)**

Vocational Education and Training (VET) is education and training that gives students skills for work, particularly in the trades and industry. It is the kind of education offered by TAFE colleges and a range of other registered training organisations. In the SACE students are able to study VET and earn credit points towards their certificate. This means that some of the 200 SACE credits required to complete the SACE can be gained through a VET focus, provided the Personal Learning Plan, Research Project, and the Stage 1 English and Mathematics requirements are also satisfied.

VET courses are delivered subject to the Australian Quality Training Framework. This means that courses are recognised by Registered Training Organisations, including TAFE, across the country. VET courses can range from a Certificate I or II (most common) through to a Certificate III or Diploma course. Apprenticeships generally sit at a Certificate III level. Diploma and Advanced Diploma qualifications can be used to gain entry into University courses.

Courses are of varying duration, ranging between a term and a full year. Courses are most often delivered one day per week but may also be for just a portion of the day or after school. A VET course can be undertaken by students in Years 10, 11 or 12. They may lead into school-based traineeships or school-based apprenticeships for some students.

In terms of assessment, VET courses are competency based; this means that most tasks and assessment are very hands on and practical in nature. Units of competency can be completed and awarded even if a student does not complete an entire program.

VET courses can be found to suit the interests of most students. A list of common offerings is below:

Advertising & Graphic Design	Fashion Design	Multimedia
Agriculture	Front of House	Music industry skills
Animal studies	Massage	Painting & Drawing
Aquaculture	General Construction	Pharmacy
Automotive	Hair & Beauty	Photography
Business Services	Hairdressing	Sport and Recreation
Child Care Community	Health	Support Services
Conservation & Land Management	Horticulture	Technology
Electrotechnology	Hospitality	Tourism
Engineering - Metal fabrication	Kitchen Operations	Transport & Distribution
Entertainment & Theatre	Meetings & Events	Vocational Geosciences

If you have any further questions regarding VET courses, please contact the VET Coordinator.

## **Headstart**

The Headstart program is facilitated through the University of Adelaide and is open to students in Year 12 that are either accelerated or high achieving in their Year 11 studies.

Headstart provides highly motivated students with a challenge beyond the Year 12 curriculum and the chance to combine secondary school and university studies.

Headstart students can choose to replace, or supplement, their Year 12 subjects with university courses. University courses are recognised by the SACE Board, allowing students to use them towards their SACE Stage 2 completion and therefore their university aggregate and selection Rank calculation.\*

Headstart students may also receive credit towards their degree if they enrol in a University of Adelaide degree after secondary school.

Entry into the Headstart program is via an application process which involves recommendation from the school based on academic performance.

In Term 3 there will be a Headstart information session. Further information is available on the University of Adelaide's website: <https://www.adelaide.edu.au/headstart/>

\*Please note, only 20 non-SACE credits can be used towards an ATAR calculation.

# Contacts

Martin McKinnon	Director of Teaching & Learning	<a href="mailto:mmckinnon@pac.edu.au">mmckinnon@pac.edu.au</a>
Cynthia Psaromatis	Assistant Director of Teaching & Learning: Middle Years 7-10	<a href="mailto:cpsaromatis@pac.edu.au">cpsaromatis@pac.edu.au</a>
James Mower	Assistant Director of Teaching & Learning: IBDP	<a href="mailto:jmower@pac.edu.au">jmower@pac.edu.au</a>
Sara Browning	Assistant Director of Teaching & Learning: SACE	<a href="mailto:sbrowning@pac.edu.au">sbrowning@pac.edu.au</a>
Monica Magann	Careers Counsellor	<a href="mailto:mmagann@pac.edu.au">mmagann@pac.edu.au</a>
Frank Palladino	VET Coordinator	<a href="mailto:fpalladino@pac.edu.au">fpalladino@pac.edu.au</a>
Scott Parker	Year 12 Coordinator (2022)	<a href="mailto:sparker@pac.edu.au">sparker@pac.edu.au</a>
Emma Dibb	Year 11 Coordinator (2022)	<a href="mailto:edibb@pac.edu.au">edibb@pac.edu.au</a>
Andrew MacGregor	Year 10 Coordinator (2022)	<a href="mailto:amacgregor@pac.edu.au">amacgregor@pac.edu.au</a>

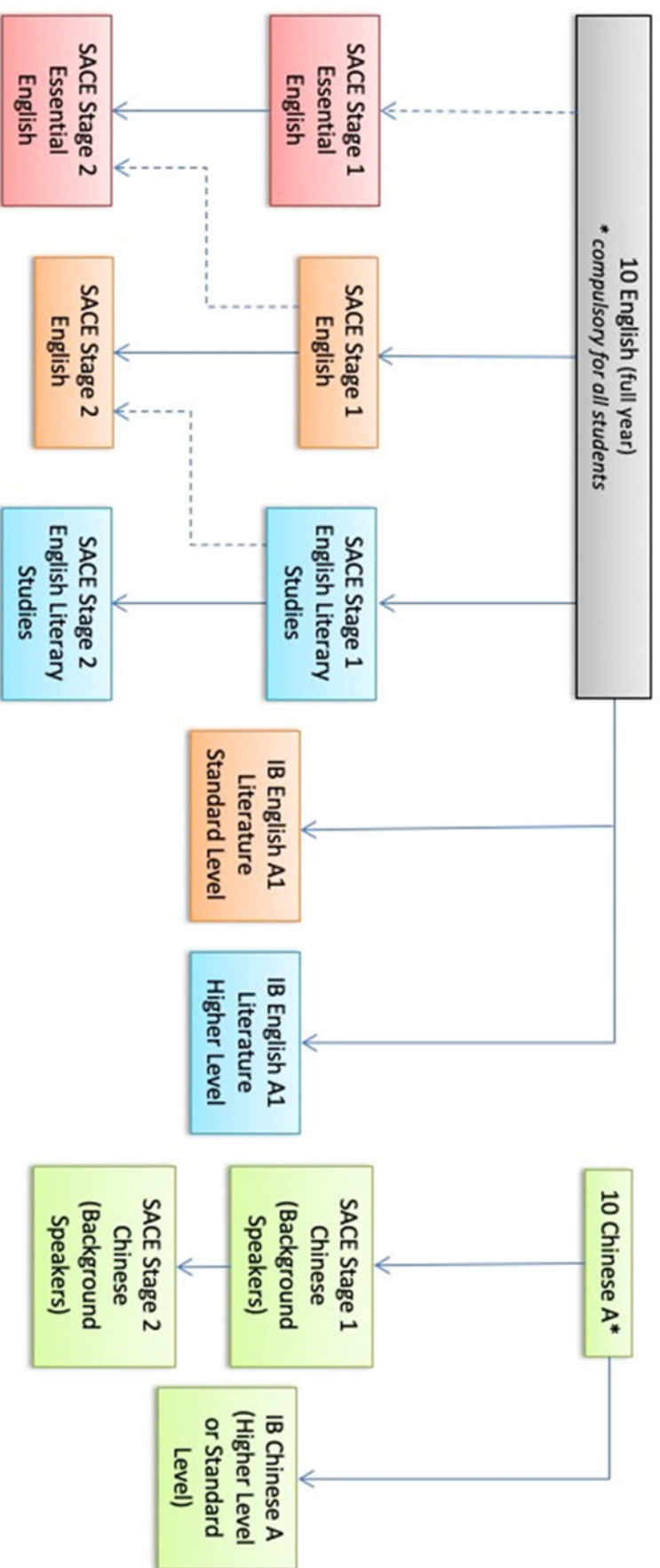
# Useful websites

Prince Alfred College website: [www.pac.edu.au/school/senior-school/senior-curriculum/](http://www.pac.edu.au/school/senior-school/senior-curriculum/)

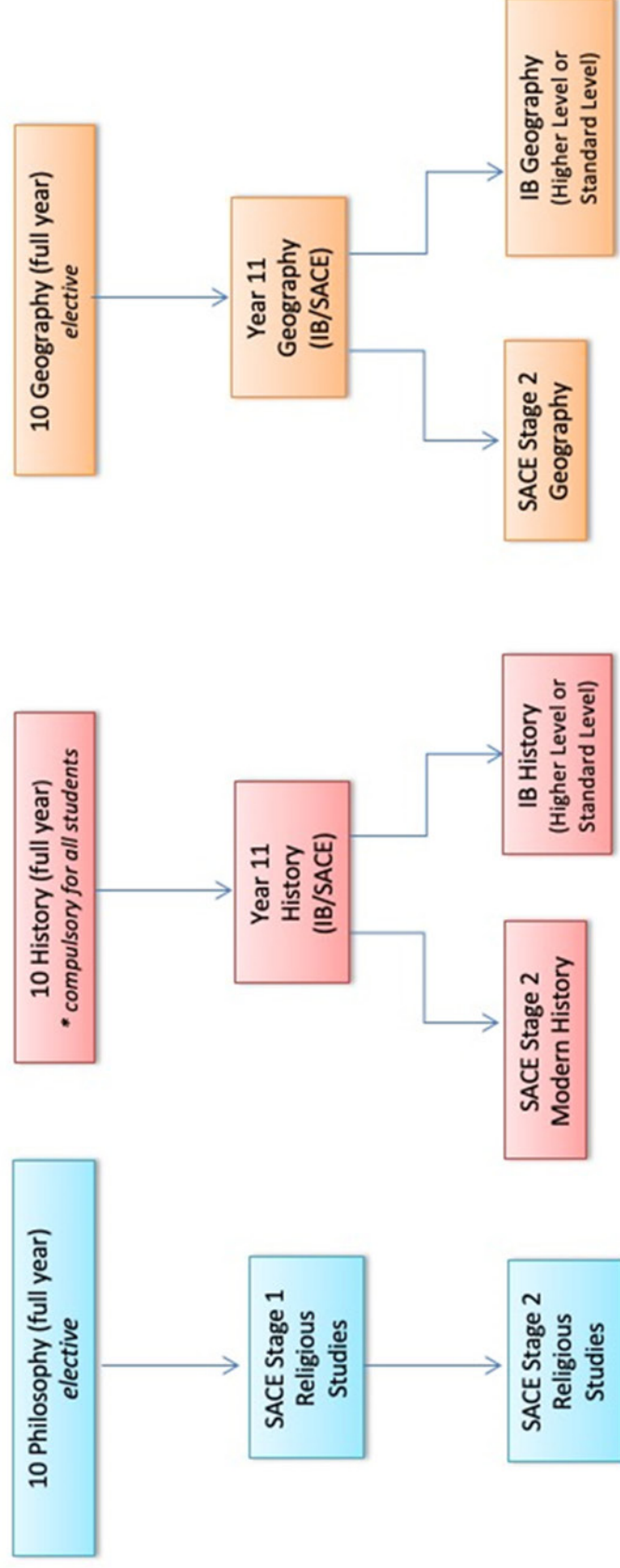
International Baccalaureate: [www.ibo.org](http://www.ibo.org)

SACE: [www.sace.sa.edu.au](http://www.sace.sa.edu.au)

SATAC: [www.satac.edu.au](http://www.satac.edu.au)

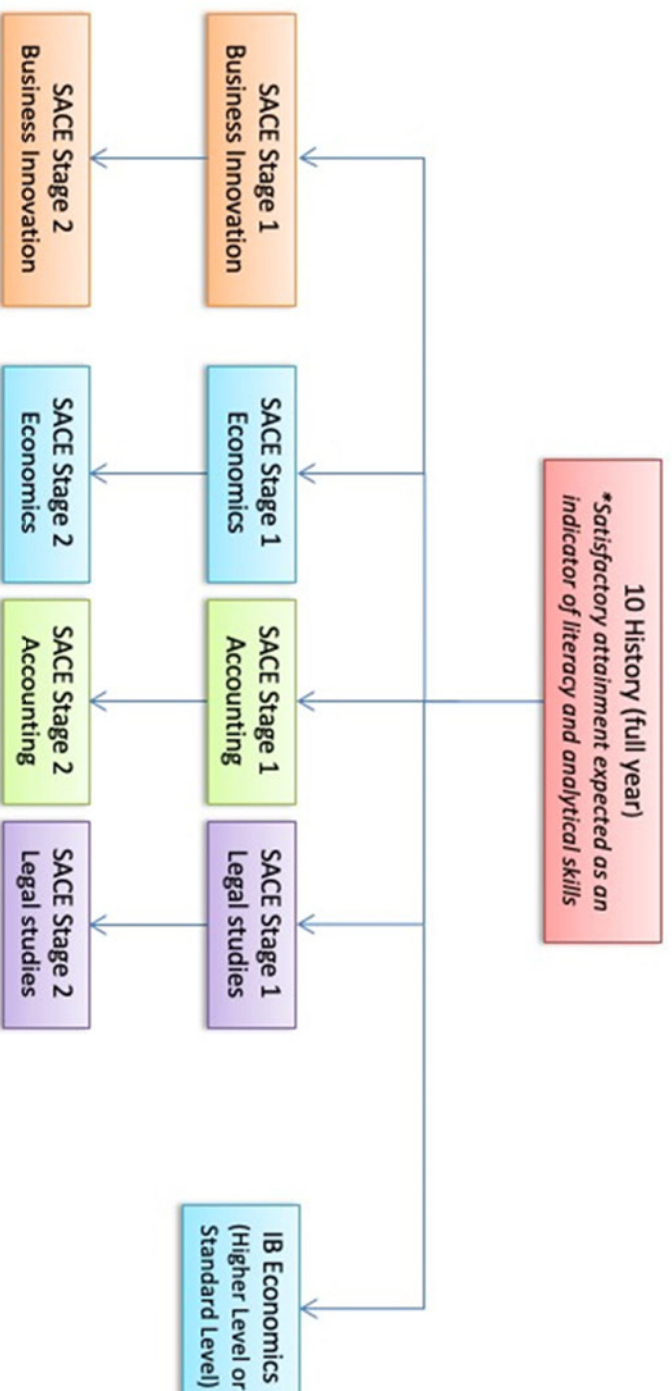


## Academic Pathways Year 10 – Year 12 Humanities



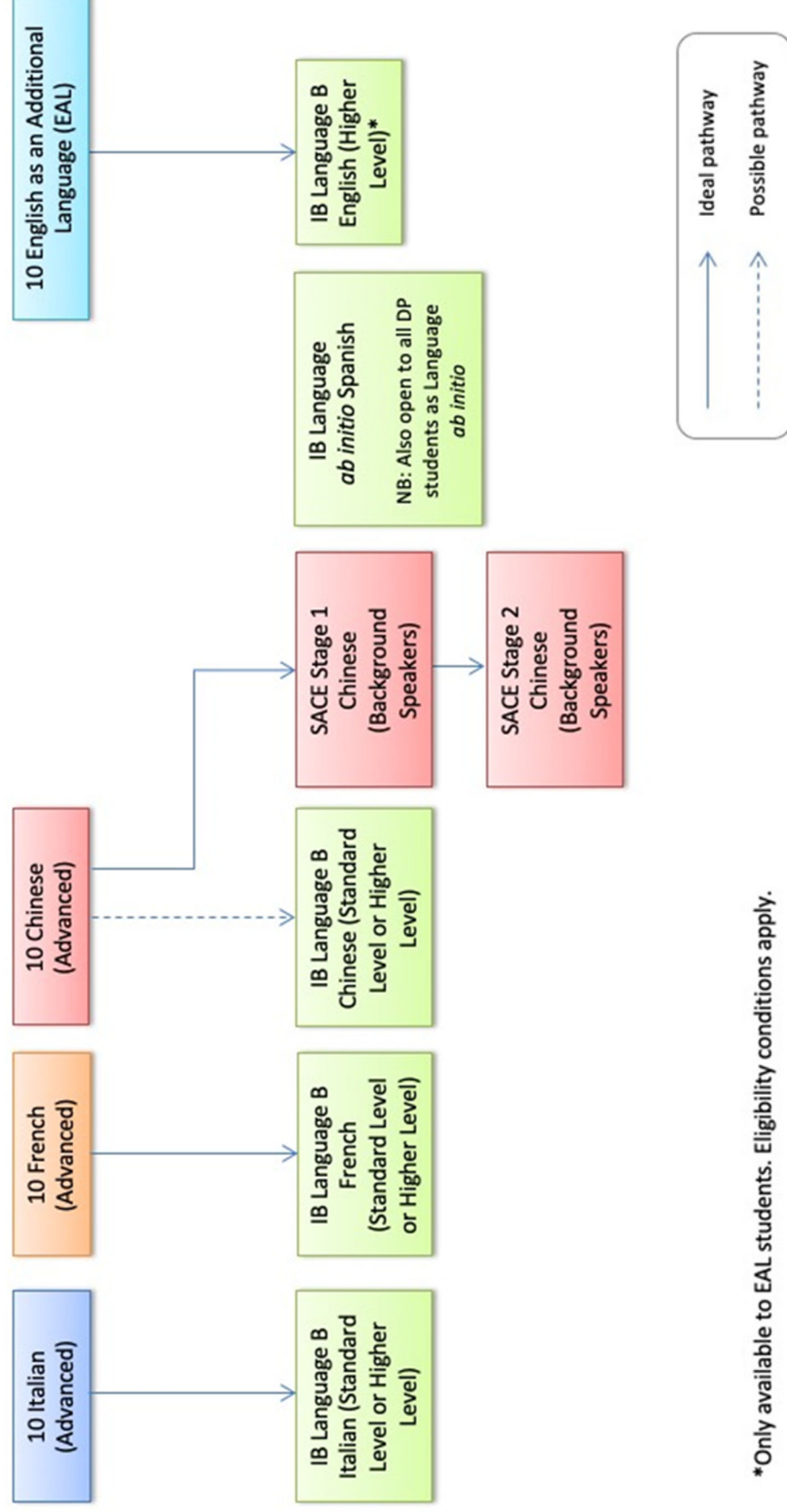
 Ideal pathway  
 Possible pathway





## Academic Pathways Year 10 – Year 12

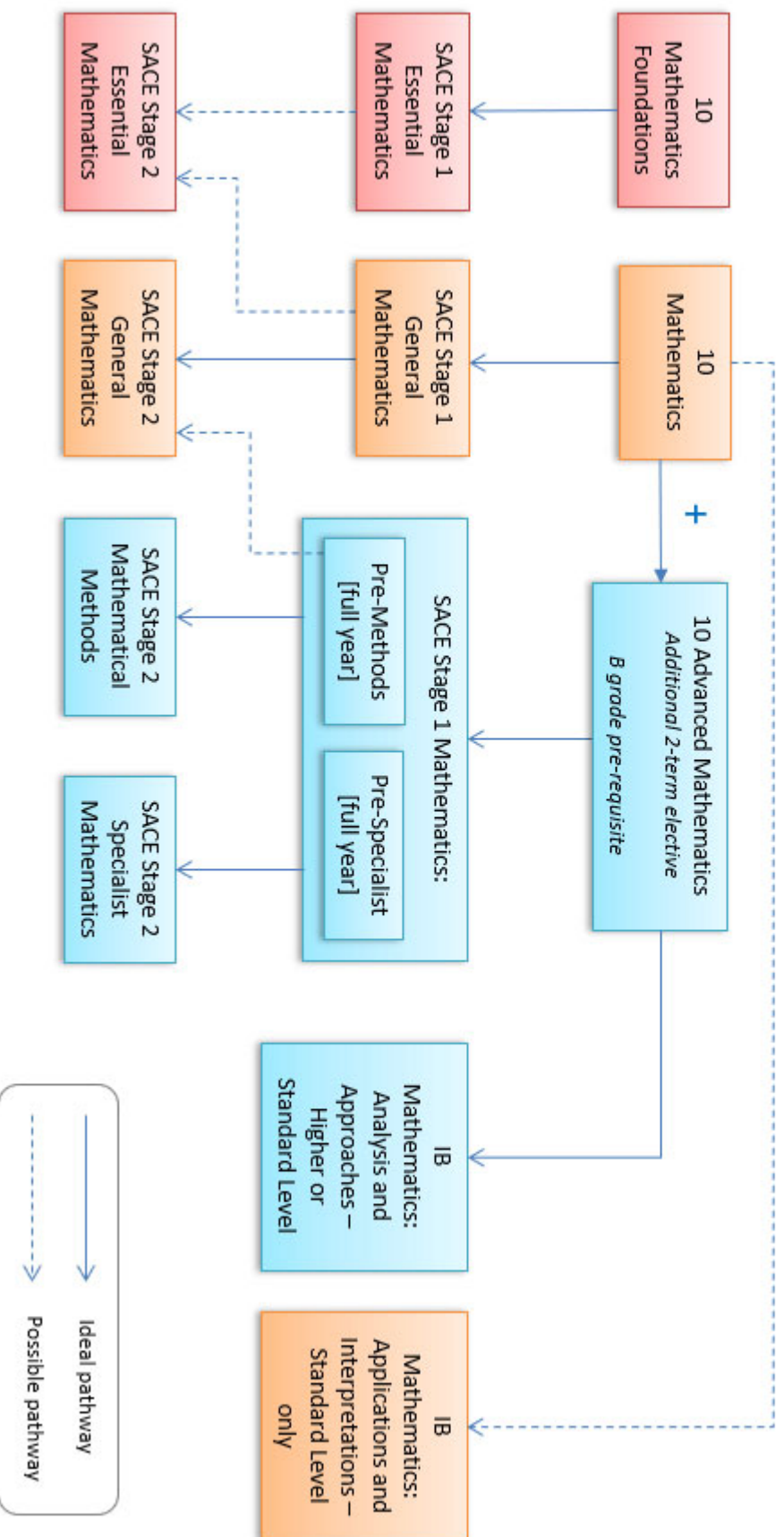
Languages: French, Italian, Chinese, Spanish, EAL

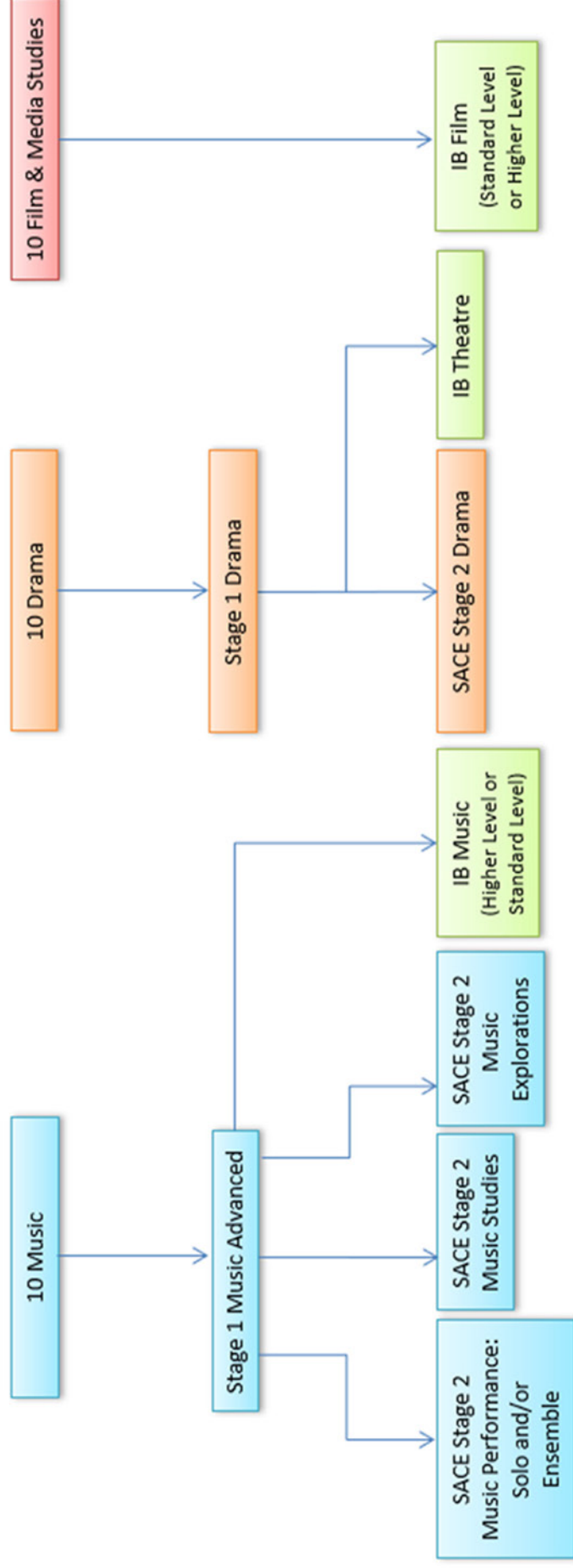


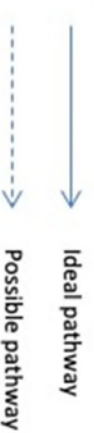
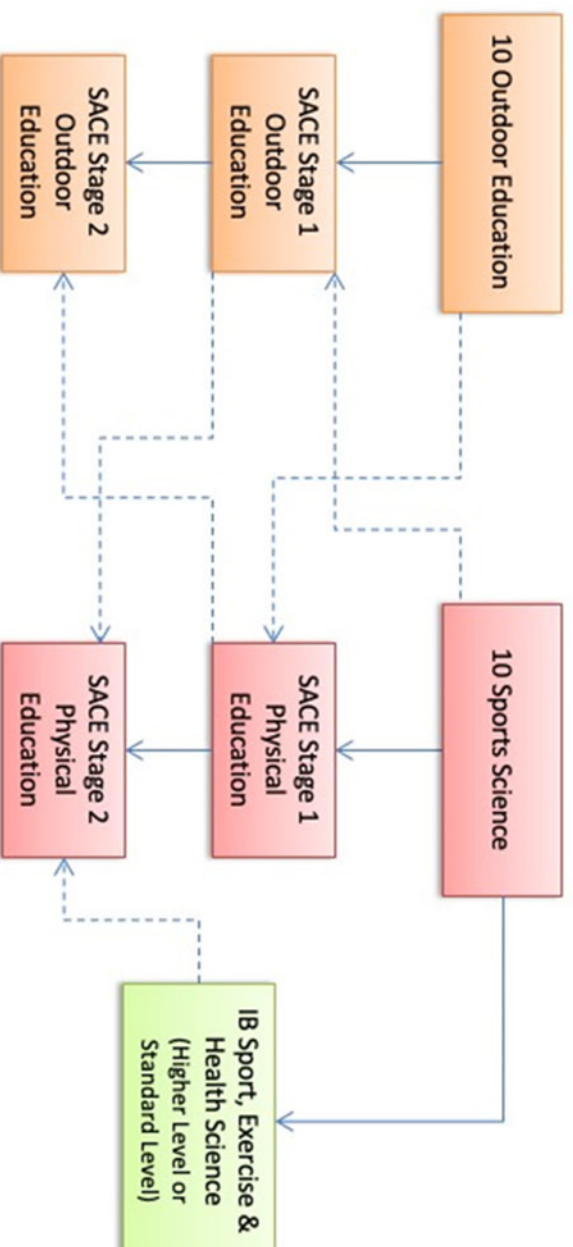
\*Only available to EAL students. Eligibility conditions apply.

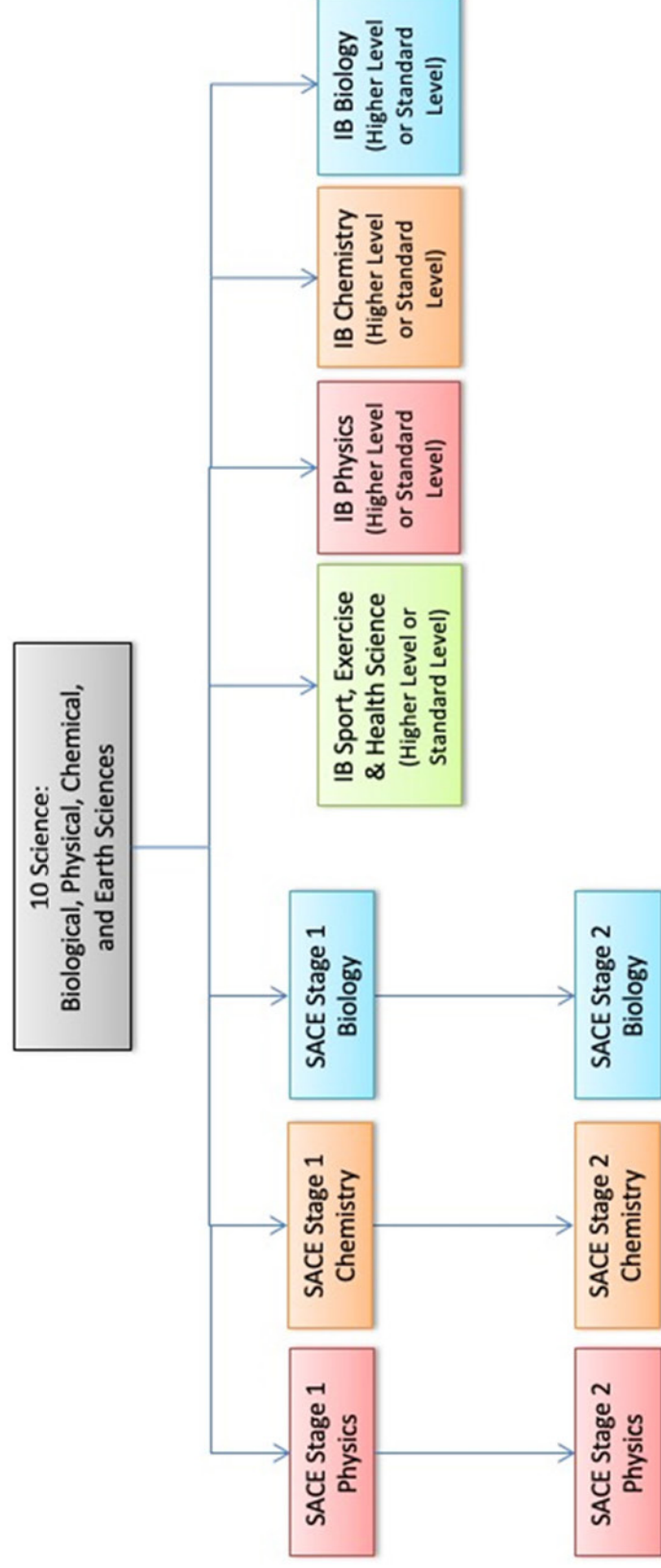


## Academic Pathways Year 10 – Year 12 **Mathematics**









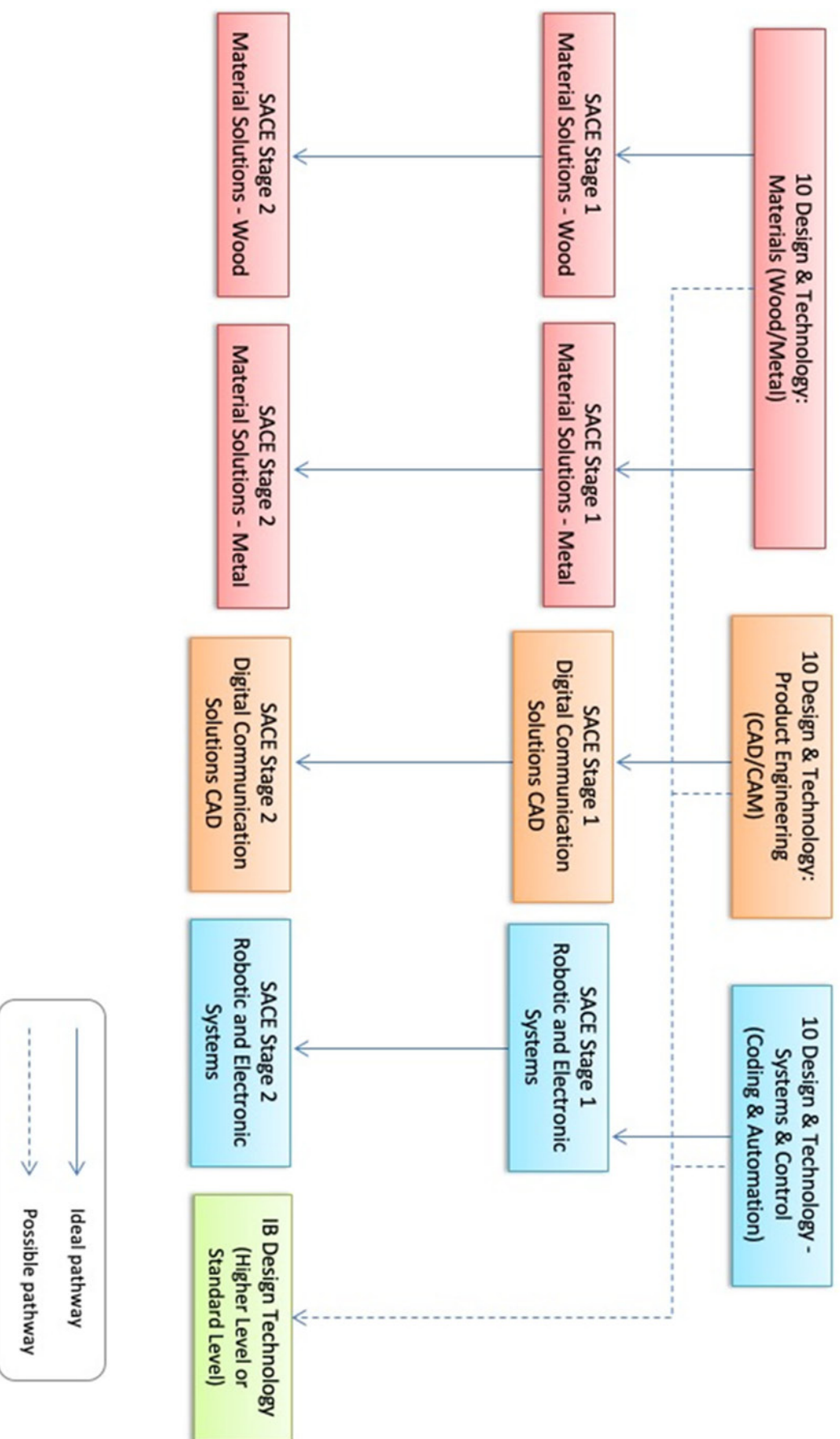
\*Year 10 elective course: Physical & Health Education (Sport Science) is an ideal preparation for IB Sport Science



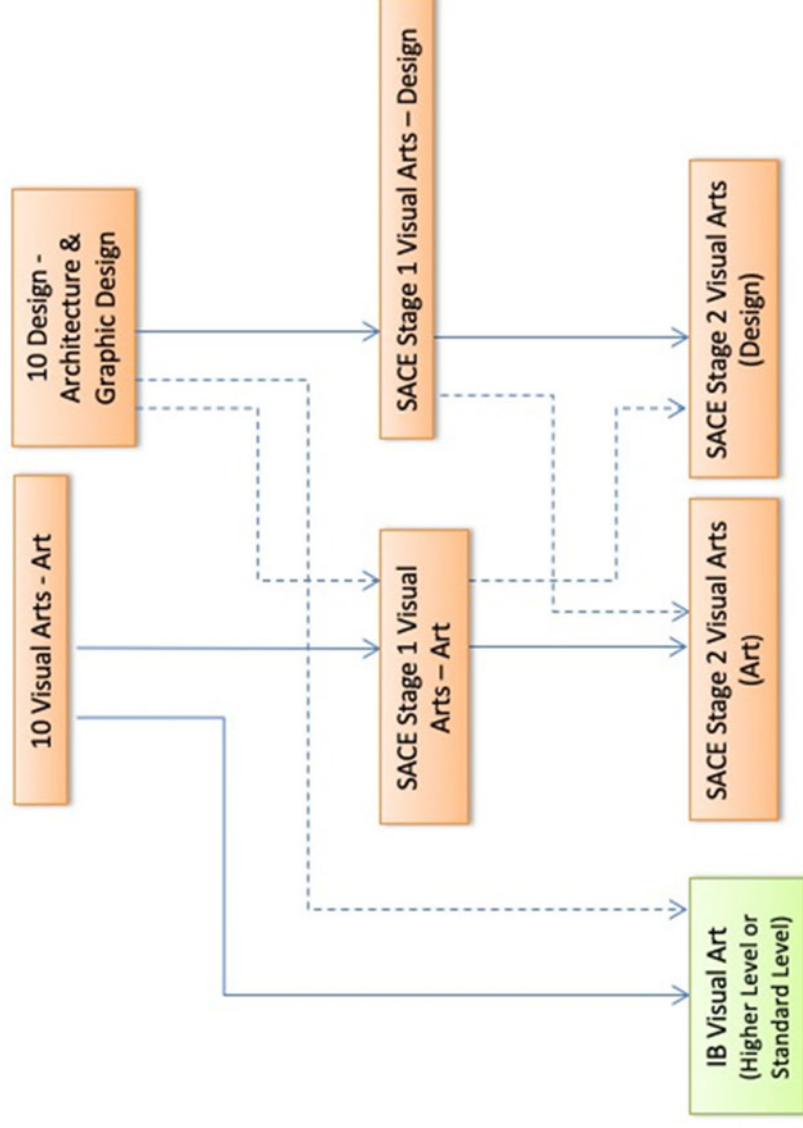


PRINCE ALFRED COLLEGE

## Academic Pathways Year 10 – Year 12 **Design & Technology**







# Year 10 Course Descriptions *(Australian Curriculum)*

## English

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### Compulsory

#### Course Aim:

- To deliver the Australian Curriculum: English
- To enable students to recognise the purpose and major ideas of a given text, and to engender an appreciation of the means by which these are conveyed
- To provide opportunities to demonstrate knowledge through the creation of texts
- To provide students with sufficient experience in English to make informed decisions regarding options beginning in Year 11.

**Course Description:** Students study a range of text types that allow them to engage with the three cross-curriculum priorities outlined in the Australian Curriculum, viz. Aboriginal and Torres Strait Islanders histories and cultures, Asia and Australia's engagement with Asia, and Sustainability. These text types include non-fiction, film, prose and poetry. Students compose their own single and multi-modal texts that aim to achieve a particular purpose. They also explore how languages have evolved and continue to evolve due to historical, social and cultural change, demographic movements and technological innovations. Understanding is demonstrated through written critical analysis, oral presentations and the production of creative single and multi-modal texts.

## English as an Additional Language

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### Compulsory alternative to English for EAL students

**Assumed Knowledge:** Previous study of English as an additional language

#### Course Aim:

- To further develop oral and written communication skills in English.
- To understand, analyse and appreciate more sophisticated texts to provide insight into the culture of Australia and other anglophone countries.

**Course Description:** The course will further students' knowledge of grammar and improve their ability to express themselves effectively in written and spoken English. Students will develop an appreciation of a range of literary and non-literary texts and look at the structural, linguistic and contextual features of various text types. They will use the language to explore topics such as identity, migration and the environment.

## Geography

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### Optional elective

**Course Aim:** This course allows students to continue with their Geography studies and to develop skills such as mapping, investigating, interpreting data and creating fieldwork reports. The course has a practical component which involves the collection and analysis of primary data.

**Course Description:** The course is focused on the development of knowledge around both physical and social geography. Erosional and depositional processes, hazard events and responses, development and population are all covered in-depth during the course. Emphasis throughout the course will be placed on the human and physical interaction of geographical issues and the rationale and response to geographical issues.

## History

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### Compulsory

**Course Aim:** This course allows students to complete their 4-year chronological History studies and provides them with the opportunity to further develop History skills, particularly in the areas of critical analysis, evaluation of sources and research.

**Course Description:** History in Year 10 focuses on the key events during the 20<sup>th</sup> Century. The course begins with a consideration of the aftermath of World War II and progresses towards the beginnings, course and outcomes of World War II. There will be a focus on the acquisition of human rights following the atrocities of the war, and the gradual move towards civil rights throughout the world, including a study of the American Civil Rights movement and the 1967 Australian referendum. The course is designed as a transition to the demands of Year 11 and 12 Humanities Subjects.

## Philosophy

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### Optional elective

**Course Aim:** To help students understand the wider contexts of religion, politics and ethics in which their lives are implicated, and which are so central to the issues they encounter. By means of these inquiries, we will seek to develop and refine student's capacities for philosophical investigation and analysis, with a particular emphasis on developing their abilities, both spoken and written, to develop, scrutinise and critically evaluate arguments and justifications.

**Course Description:** The course gives students the opportunity to explore, directly and sequentially, the principal concerns of, respectively, religion, politics and ethics. We will examine religion in terms of the notion of 'our true nature' as it is understood by different religions, and as it relates to their traditions of doctrine and practice. We will then look at politics both as a study of government and as an understanding of individual action, and ethics as a study of 'the good' and of human conduct. We will then consider how each of these crucial dimensions of our lives relates to each other. Throughout, our focus will be the understanding of the concept 'humanity': the ways in which religious traditions, political movements and ethical positions derive from, shape, and are shaped by particular views of who and what we are.

## Languages: Chinese A (Chinese Literature Studies)

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**Optional elective; if selected must also be studying English as an Additional Language**

**Assumed Knowledge:** Chinese language as first/heritage/strongest language

**Course Aim:** To further develop students' competence and confidence in spoken and written Chinese.

**Course Description:** This course will give students opportunities to explore traditional and contemporary literature and current social, political and cultural issues. The focus will be on speaking, reading comprehension and writing skills. The topics and contents selected will ensure that students are able to apply their prior knowledge in new contexts and use their language skills for various purposes. The assessment tasks designed will allow students to further develop their entire language skills and cultural understanding.

## Languages: Chinese, French or Italian

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### Optional elective

**Assumed Knowledge:** These courses are for students that have studied the language already. Students will be placed according to their ability and experience in Chinese, French or Italian. Those who wish to continue with Chinese, French or Italian in Years 11 and 12 must complete this class.

### Course Aim:

- To gain competence in the language for study and leisure in a range of contexts.
- To become equipped with a skills base to facilitate further language learning with a focus on oral, visual and written literacies.
- To develop respect for, and understanding of, the linguistic and cultural heritages.

### Course Description:

 The course will

- provide students with a wide range of opportunities to build on prior knowledge and skills in order to help them progress to the next phase of their language development
- develop students' receptive and productive skills to enable them to understand and use print-based and digital spoken, written and visual texts in a variety of contexts
- develop students' knowledge and understanding through learning of language, learning through language, and learning about language.

## Mathematics

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### Compulsory

**Course Aim:** The aim of this course is to develop an understanding of mathematical concepts and fluency with processes relating to number and algebra, measurement and geometry and statistics and probability.

**Course Description:** In this course, students will use number and algebra in a range of problem - solving situations, such as finance and trigonometry. Students will interpret and connect algebraic functions and graphical representations and use these to analyse and solve equations. Students choose appropriate numerical, technological and graphical techniques to interpret and compare data sets presented to them and determine theoretical probabilities and understand the concept of independence. Students will construct geometric proofs involving the application of congruence and similarity. Finally, students will communicate solutions in appropriate formats and judge the reasonableness of results and evaluate the strategies and techniques used.

## Mathematics: 10 Advanced

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### Enrolment subject to course counselling

**Length of Course:** Two terms

**Assumed Knowledge:** A minimum B grade achievement in Terms 1 and 2 of Year 10 Mathematics is a requirement.

**Course Aim:** The aim of this course is to develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes relating to number and algebra, measurement and geometry and statistics and probability. This course covers additional, more complex concepts which are pre-requisite knowledge for SACE Mathematical Methods and Specialist Mathematics as well as IBDP Higher Level Mathematics. It is also an ideal foundation for other senior Mathematics courses.

**Course Description:** This course is a pre-requisite for students who wish to study higher level mathematics in later years and is run in conjunction with the standard Year 10 course. Students will investigate further trigonometry and use the unit circle to define trigonometric functions. They will be able to solve trigonometric equations and use trigonometric relationships to solve problems involving non-right angled triangles. They are introduced to hyperbolas, circles and exponential functions, solving exponential equations and using index laws to discover logarithms. Students will use proofs to determine congruence, similarity and chord properties in circles. They will model linear relationships in bivariate data and compare data sets using the mean and standard deviation.

## Performing Arts: Drama

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### Optional elective

**Assumed Knowledge:** Although there are no formal prerequisites for the study of Drama in Year 10, prior theatrical study and/or training in Years 7-9 will be of immense benefit.

**Course Aim:** This course aims to deepen students' understanding of theatre, introducing them to a wider range of genres and practitioners and offering further performance opportunities.

**Course Description:** in Year 10 Drama, students continue to develop their creativity and ensemble skills through a range of tasks. They explore a variety of theatre texts, styles and techniques including Naturalism, Shakespeare and Grotowski. They view and discuss their own theatre and the works of others, reflecting on process and intent. Students will collaborate to create their own dramatic work based on their experiences throughout the year.

## Performing Arts: Film and Media Studies

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### Optional elective

**Course Aim:** The course aims to give students an 'industry style' experience of film and television production and enable students to experience all aspects of the production process. Students will engage both in a creative and design-based production process.

**Course Description:** This course emphasizes a hands-on approach to skill development. Students will be engaged in fieldwork and studio production that includes the use of cameras, digital sound and editing software, sound recording equipment and lighting equipment. Alongside this practical experience, students will also engage in the close reading of film texts, with an emphasis on Australian cinema, to support their understanding.

## Performing Arts: Music

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**Enrolment in Year 10 Music is subject to course counselling with the Director of Music.**

### Optional elective

**Assumed Knowledge:** Completion of Year 9 Music course or equivalent knowledge/skills from other music studies. Must be undertaking tuition on an instrument/voice.

**Course Aim:** The course aims to continue the development of students' music theory, aural and composition abilities, their solo and ensemble performance skills, and their understanding of music in various historical contexts. They will also be introduced to more advanced arranging and composition techniques, in preparation for further study at SACE or IBDP level.

**Course Description:** The course is split into four components; music theory/aural, music in context, music technology and performance. Students hone their ability to read, write and understand music, including more complex rhythms, intervals, scales, terms and signs, and more. Their aural skills (listening) will be developed by applying their theory knowledge to various listening situations, from exercises at the piano, to analysing the musical elements in a range of songs. Students will learn how to write music for various instruments, and will use the notation program Sibelius and/or the Digital Audio Workstation (DAW) Logic Pro to create their own arrangements which will be performed by classmates. Performance will include a solo performance on your instrument/voice twice per year, including masterclass sessions to give each other constructive feedback. Students will also form a class ensemble(s) that will learn a range of music styles, including jazz music and improvisation skills. Music in context topics will include film music, jazz history, classical history, and world music. Students will also explore the basics of sound concepts and live sound setup.

## Health & Physical Education: Outdoor Education

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**Optional elective**

**Assumed Knowledge:** Nil

**Course Aim:** This course aims to enable students to develop an appreciation and understanding of the value of being physically active in adventure-based activities and the motivation to make healthy life choices. This subject encourages students to develop the knowledge, skills and attitudes that will contribute to a long-term balanced and healthy lifestyle in the outdoors.

**Course Description:** In order to give the students the best opportunity to meet the outdoor education objectives at a high level, the curriculum is balanced with regard to both theoretical and practical content. The curriculum will cover eight topics and have a balance of the following throughout the program:

Topic 1: Nutrition & Energy Requirements

Topic 2: Aquatic Safety and Emergency response

Topic 3: Cooking and Expedition Planning

Topic 4: Campcraft skills

Topic 5: Cultural and Environmental Perspective

Topic 6: Expedition experience in 1 of the following – Surfing, Mountain Biking, Kayaking and Rock Climbing, after a foundation skills-based expedition. Both expeditions are 3 day / 2 night experiences.

Topic 7: Orienteering and Navigation

Topic 8: Environmental Sustainability

## Health & Physical Education: Sport Science

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**Optional elective**

**Assumed Knowledge:** Nil

**Course Aim:** Sport Science is for those students who plan to continue their physical education studies in Year 11 and 12; either through the SACE Physical Education course or the IB Diploma Sport, exercise & health science subject.

Students will develop an understanding of why physical activity and healthy lifestyle choices are important, while exploring a range of contemporary sport science concepts.

**Course Description:** The course offers a balance of both theoretical and practical components. Four key theory topics will be covered over the year, namely: The process of energy production for physical activity; Training, conditioning and performance enhancement; How the body responds to exercise; Nutrition for sport and health.



Practical activities will include a range of individual and team sports, plus an in-depth training and conditioning program in the RED Centre gymnasium.

## Sciences

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### Compulsory

**Assumed Knowledge:** Year 9 Science course

**Course Aim:** The course explores the biological, chemical, physical and Earth sciences to prepare students for the study of Physics, Chemistry or Biology at either SACE or IBDP level in Year 11.

From a practical perspective, this course aims to develop an understanding of the nature of the scientific process and the ability to use a range of skills in this regard, including questioning, planning and conducting experiments and investigations based on ethical principles, collecting and analysing data, evaluating results and drawing critical, evidence-based conclusions.

Specific topics to be studied include Cell Structure, DNA and Cell Division, the Reproductive System and Genetics, Rates of Reactions, Energetics and the Mole, Newtons Law of Motion, Gravitational Fields, Energy and The Universe.

## Design & Technology: Materials Technology - Wood/Metal

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### Optional elective

**Assumed Knowledge:** Nil

#### Wood

**Course Aim:** To gain an understanding of design and production techniques relevant to the production of framed and solid carcass timber furniture products.

**Course Description:** This course is related to the fields of carpentry, cabinetmaking, construction, manufacturing, industrial design, interior architecture and engineering.

This is a practical based subject that initially engages students in specific skills tasks for a range of framing joints, related hand and power tools, woodworking machines and workshop safety. Students use the AC Design Cycle to investigate a range of materials, production techniques and design requirements for framed and solid carcass timber products. Students produce a design folio documenting their work in the major project, comprising investigation tasks, preliminary drawings, concepts and technical drawings, production planning, as well as an evaluation of the major project and its construction.

#### Metal

**Course Aim:** To gain an understanding of design and production techniques relevant to the production of fabricated and welded mild steel products.

**Course Description:** This course is related to the fields of welding and metal fabrication, construction, manufacturing, industrial design, architecture and engineering. This is a practical based subject that initially engages students in specific skills tasks in MIG, Arc and Gas welding techniques, steel cutting and fabrication tools and processes, finishing techniques, and workshop safety. Students use the AC Design Cycle to investigate material options, production techniques and design requirements suitable for welded mild steel products, with the aim of designing and producing their major project.

## Design & Technology: Product Engineering - Computer Aided Design/Computer Aided Manufacturing

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Optional elective

Assumed Knowledge: Nil

### Computer Aided Design - CAD

**Course Aim:** Through practical, project-based work utilizing the complete Product Design Cycle, students aim to develop an understanding of the processes involved in the design, engineering and production of consumer products. This includes exposure to advanced 3D CAD processes and techniques in engineering and product design, using advanced features of industry-standard 3D Parametric Modelling software (Autodesk Inventor).

**Course Description:** This practical-based course will give students the opportunity to engage with the Product Design Cycle to generate complex and well-resolved representations and prototypes of designed and engineered products. Students will gain experience and understanding of advanced CAD modelling tools and processes, technical drawing conventions, and digital presentation techniques. The Australian Curriculum Design Cycle is central to this subject, encompassing tasks related to design research, innovation, planning, production, and evaluation of product design solutions. There is a focus on nurturing design innovation and creativity whilst maintaining a strong skills base and awareness of technical detail. This course is related to the fields of engineering, manufacturing, architecture, industrial design, and 3D media production.

### Computer Aided Manufacturing - CAM

**Course Aim:** Students are exposed to advanced 3D CAM processes and techniques in engineering and product design, using advanced features of industry-standard Computer-Aided Manufacturing equipment including CNC routers, 3D printing, Laser cutting and CNC Mills.

**Course Description:** Students will gain experience and understanding of advanced CAM equipment and processes, technical drawing conventions, and digital presentation techniques. The realisation of these projects is undertaken using a variety of machines, ranging from 3D printers, Laser cutting and Engraving and CNC mills. The Australian Curriculum Design Cycle is central to this subject, encompassing tasks related to design research, innovation, planning, production, and evaluation of product design solutions. There is a focus on nurturing design innovation and creativity whilst maintaining a strong skills base and awareness of technical detail. This course is related to the fields of engineering, manufacturing, architecture, industrial design, and 3D media production.

## Design & Technology: Systems & Control Products - Coding & Automation

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Optional elective

Assumed Knowledge: Nil

### Automation - Programming Arduino

**Course Aim:** Students will use coding to gain an understanding of controlling systems in real world contexts. Project based practical work will challenge students to generate complex and well-resolved prototypes to solve engineering challenges.

**Course Description:** This is a practical, project-based subject focusing on automated control through the coding of an Arduino (micro controller). It will focus on systems, and how they can be used to solve problems through the AC Design Cycle. Students will gain an understanding of control principles as well as how to design and engineer custom parts to provide novel solutions to problems.

The realisation of several smaller projects will require the use of a number of digital and manufacturing technologies, such as programming, 3D printing and laser cutting/engraving.

This course will give students an appreciation of real-world engineering design challenges as they will need to use their creativity and problem-solving skills to manage finite resources, working within constraints to deliver their product solution. The focus on physical automated control systems will also require students to work within tight technical specifications in the creation of project components.

This course is related to the fields of ICT, mechanical engineering, electric engineering, manufacture, industrial design and digital media production.

## Visual Arts: Architecture and Graphic Design

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### Optional elective

#### Assumed Knowledge: Nil

**Course Aim:** Architecture and Graphic Design is a creativity-based subject, which introduces students to the various design disciplines within architecture and graphic design. This year long course explores the principles and practices involved in solving visual problems in both 3 dimensional and 2 dimensional forms. The 3-D component predominantly involves architectural practices and the 2-D component predominantly involves graphic design practices. The aim of which being to expose students to a broad range of design experiences in various forms and modes, allowing opportunities for multi-modal learning.

**Course Description:** Students will have opportunities to develop their skills and knowledge within architectural sketching, computer aided architectural design and model making, as well as responding to simulated architectural project briefs. This will involve usage of specialised design software, such as Sketch Up, Podium and Photoshop. Within graphic design, students will have opportunities to develop their skills and knowledge in conceptual graphic sketching, computer aided design, mock-up creation and basic photography, as well as responding to simulated graphic project briefs. This will involve usage of specialised design software, such as Illustrator and Photoshop. The course will have an appropriate balance between hand creation of work and digital design, with an overarching emphasis on creative problem solving, qualitative design practice and theory and technical skill acquisition.

## Visual Arts: Visual Art

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### Optional elective

#### Assumed Knowledge: Nil

**Course Aim:** Year 10 Visual Art is a year-long course with the aim of enabling students to develop technical skills in studio practice, including drawing, painting, printmaking, photography and ceramics. The ability to think critically and creatively is also encouraged along with fostering independent learning skills to facilitate and develop ideas for artworks. Students draw inspiration from artworks and artists from a diverse range of historical, cultural and contemporary contexts to critically analyse the ways that artists respond visually to the world around them.

**Course Description:** Year 10 Visual Art is predominantly a practical subject in which students are given the opportunity to facilitate skills and ideas to create their own artworks that respond in a personal, creative and meaningful way to their own ideas about the world. This is achieved through a folio process of researching and working in the style of selected artists, analysing artworks and understanding cultural, historical and contemporary contexts. It is fundamental students appreciate factors that influence artists and how they go about generating their own ideas, realising these in a final work. Students may engage with artists and artworks

through gallery and artist studio experiences. We seek to focus on developing creativity and fostering independent inquiry through a process of exploration, risk-taking and effective decision making.

## Vocational Education Training: VET - Gateway to Trade

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**Optional elective: Pre-requisite for VET at Stage 1.**

**Assumed Knowledge:** Nil

**Course Aim:** The Gateway to Trade course provides valuable preparation for Year 10 students contemplating future studies in a variety of trade related areas. In this course, students will gain an appreciation of the range of trades that are available namely in the construction, engineering, and automotive fields and the wide variety of career options and tertiary study options that a trade can lead to. The course will assist students in building their knowledge base and developing work-ready skills in a simulated trade context. The course also assists students to achieve VET Readiness (VETRO) requirements, by supplying a certificate of participation.

**Course Description:** This practical-based course will give students the opportunity to engage in projects covering construction (carpentry, tiling, paving, plumbing), welding and fabrication and small engine maintenance. In addition, the program will include learning and obtaining a White Card, which will be delivered by a registered training organisation.

Topics include:

- Using tools and machinery
- Reading and interpreting plans
- Estimation and costing
- Planning to undertake a project
- Timber framing
- PVC pipe work
- Concreting to simple forms
- Welding and Sheetmetal fabrication
- Small engine dismantling, parts identification, and reassembly

**Pathways:**

After completing the Gateway to Trade course, students may elect to continue into VET courses at Stage 1 (Year 11) in: Certificate II in Construction (General, Plumbing or Carpentry focus), Certificate II in Engineering Pathways, Certificate II Automotive Servicing, Certificate II Electrotechnology or a range of other VET courses. Students will also be able to continue into Stage 1 Woodwork or Metalwork if they do not wish to pursue a VET pathway.

## Personal Learning Plan (PLP)

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**Compulsory**

**Duration:** Two terms

**SACE completion will not be recorded without a passing grade in the Personal Learning Plan (PLP).** Notwithstanding, the PLP allows considerable flexibility and this sees highly differentiated content in schools around the State.

**Course Description:** The Personal Learning Plan (PLP) is a compulsory 10-credit subject undertaken at Stage 1. All students in Year 10 at the College complete PLP.

Students must achieve a C grade or better to complete the subject successfully and gain their SACE.

The PLP helps students to:

- plan their personal and learning goals for the future
- make informed decisions about their personal development, education, and training.

Developing goals for the future will engage students in activities such as:

- selecting subjects, courses, and other learning relevant to pathways through and beyond school (including IB)
- investigating possible career choices
- exploring personal and learning goals.

**Assessment:**

**School-based Assessment (70%)**

A series of written, goal-based and interactive tasks.

**Review of learning (30%)**

A final evaluative presentation of their experiences pertaining to;

- effectiveness of strategies and
- development in their capacity as a learner (the 7 Australian Curriculum General Capabilities).

# International Baccalaureate Diploma Programme Subjects

## Chinese A: Literature (Standard Level)

## Group 1

**Course Description:** Students will learn about the various manifestations of literature as a powerful mode of writing across cultures and throughout history. They will explore and develop an understanding of factors that contribute to the production and reception of literature. Through close analysis of literary texts in a number of forms and from different times and places, students will consider their own interpretations, as well as the critical perspectives of others. With its focus on literature, this course is particularly concerned with developing sensitivity to aesthetic uses of language and empowering students to consider the ways in which literature represents and constructs the world and social and cultural identities. At standard level (SL), at least 9 works (4 written originally in Chinese, 3 in translation, 2 chosen freely) must be studied across the three areas of exploration. These areas are readers, writers and texts (knowledge of literature and its close analysis); time and space (historical and cultural contexts); intertextuality (comparative study of literary texts by genre, theme, concept, allusion or theory). All works must be written by authors on the Prescribed reading list, except for the free choice.

There must be a minimum of two works studied for each area of exploration. Works must be selected to cover three literary forms, three periods and three countries or regions (as defined on the Prescribed reading list) in at least two continents.

A work is defined as one single major literary text, such as a novel, autobiography or biography; two or more shorter literary texts such as novellas; 5–10 short stories; 5–8 essays; 10–15 letters; or a substantial section or the whole of a long poem (at least 600 lines) or 15–20 shorter poems. Where more than one text is studied as part of a work, texts must be from the same author.

### Assessment:

#### External Assessment (70%)

Paper 1: Guided literary analysis (1 hour 15 minutes). The paper consists of two passages from two different literary forms, each accompanied by a question. Students choose one passage and write an analysis of it in either simplified or traditional Chinese. (20 marks: 35%)

Paper 2 Comparative essay (1 hour 45 minutes). The paper consists of four general questions. In response to one question, students write a comparative essay based on two works studied in the course in either simplified or traditional Chinese. (30 marks: 35%)

#### Internal Assessment (30%)

This component consists of an individual oral that is internally assessed by the teacher during the first year (11) and externally moderated by the IB at the end of the course. (15 minutes)

Supported by an extract from one work written originally in Chinese studied and another from a work studied in translation, students will offer a prepared response of 10 minutes, followed by 5 minutes of questions by the teacher, to the following prompt: Examine the ways in which the global issue of student's choice is presented through the content and form of two of the works that he has studied. (40 marks)



## Chinese A: Literature (Higher Level)

## Group 1

**Course Description:** the model for Language A: Literature is the same at SL and HL but there are significant qualitative and quantitative differences. At higher level (HL), at least 13 works (5 written originally in Chinese, 4 in translation, 4 chosen freely) must be studied across the three areas of exploration. There must be a minimum of three works for each area of exploration. Works must be selected to cover the four literary forms, three periods and four countries or regions as defined on the Prescribed reading list in at least two continents.

### Assessment:

#### External Assessment (70%)

Paper 1: Guided literary analysis (2 hours 15 minutes). The paper consists of two literary passages, from two different literary forms, each accompanied by a question. Students write an analysis of each of the passages in either simplified or traditional Chinese. (40 marks: 35%)

Paper 2 Comparative essay (1 hour 45 minutes). The paper consists of four general questions. In response to one question, students write a comparative essay based on two works studied in the course in either simplified or traditional Chinese. (30 marks: 25%). Aside from the smaller weighting, this is identical to SL.

Higher level (HL) essay. Students submit an essay on one literary text or work studied during the course. The essay must be 1,200–1,500 words in length. (20 marks: 20%).

#### Internal Assessment (30%)

This component is identical in all of its aspects to the SL individual oral. The global issue upon which it is based, for both SL and HL, will have large scale significance, be transnational and have an impact on everyday local contexts. The syllabus provides guidance to students for choosing a global issue to focus their orals on with a range of suggested topics: culture, identity and community; beliefs, values and education; politics, power and justice; art, creativity and the imagination; science, technology and the environment.

## English A: Literature (Standard Level)

## Group 1

**Course Description:** Students will learn about the various manifestations of literature as a powerful mode of writing across cultures and throughout history. They will explore and develop an understanding of factors that contribute to the production and reception of literature. Through close analysis of literary texts in a number of forms and from different times and places, students will consider their own interpretations, as well as the critical perspectives of others. With its focus on literature, this course is particularly concerned with developing sensitivity to aesthetic uses of language and empowering students to consider the ways in which literature represents and constructs the world and social and cultural identities. At standard level (SL), at least 9 works (4 written originally in English, 3 in translation, 2 chosen freely) must be studied across the three areas of exploration. These areas are readers, writers and texts (knowledge of literature and its close analysis); time and space (historical and cultural contexts); intertextuality (comparative study of literary texts by genre, theme, concept, allusion or theory). All works must be written by authors on the Prescribed reading list, except for the free choice.

There must be a minimum of two works studied for each area of exploration. Works must be selected to cover three literary forms, three periods and three countries or regions (as defined on the Prescribed reading list) in at least two continents.

A work is defined as one single major literary text, such as a novel, autobiography or biography; two or more shorter literary texts such as novellas; 5–10 short stories; 5–8 essays; 10–15 letters; or a substantial section or the whole of a long poem (at least 600 lines) or 15–20 shorter poems. Where more than one text is studied as part of a work, texts must be from the same author.

**Assessment:****External Assessment (70%)**

Paper 1: Guided literary analysis (1 hour 15 minutes). The paper consists of two passages from two different literary forms, each accompanied by a question. Students choose one passage and write an analysis of it. (20 marks: 35%)

Paper 2 Comparative essay (1 hour 45 minutes). The paper consists of four general questions. In response to one question, students write a comparative essay based on two works studied in the course. (30 marks: 35%)

**Internal Assessment (30%)**

This component consists of an individual oral that is internally assessed by the teacher and externally moderated by the IB at the end of the course. (15 minutes)

Supported by an extract from one work written originally in the language studied and another from a work studied in translation, students will offer a prepared response of 10 minutes, followed by 5 minutes of questions by the teacher, to the following prompt: Examine the ways in which the global issue of your choice is presented through the content and form of two of the works that you have studied. (40 marks)

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**English A: Literature (Higher Level)****Group 1**

**Course Description:** the model for Language A: Literature is the same at SL and HL but there are significant qualitative and quantitative differences. At higher level (HL), at least 13 works (5 written originally in English, 4 in translation, 4 chosen freely) must be studied across the three areas of exploration. There must be a minimum of three works for each area of exploration. Works must be selected to cover the four literary forms, three periods and four countries or regions as defined on the Prescribed reading list in at least two continents.

**Assessment:****External Assessment (80%)**

Paper 1: Guided literary analysis (2 hours 15 minutes). The paper consists of two literary passages, from two different literary forms, each accompanied by a question. Students write an analysis of each of the passages. (40 marks: 35%)

Paper 2 Comparative essay (1 hour 45 minutes). The paper consists of four general questions. In response to one question, students write a comparative essay based on two works studied in the course. (30 marks: 25%). Aside from the smaller weighting, this is identical to SL.

Higher level (HL) essay. Students submit an essay on one literary text or work studied during the course. The essay must be 1,200–1,500 words in length. (20 marks: 20%).

**Internal Assessment (30%)**

This component is identical in all of its aspects to the SL individual oral. The global issue upon which it is based, for both SL and HL, will have large scale significance, be transnational and have an impact on everyday local contexts. The syllabus provides guidance to students for choosing a global issue to focus their orals on with a range of suggested topics: culture, identity and community; beliefs, values and education; politics, power and justice; art, creativity and the imagination; science, technology and the environment.

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**Chinese B (Standard and Higher Level)****Group 2**

**Course Description:** Language B Standard and Higher Level language acquisition for students with some previous experience of learning the language. While studying the language students also explore the culture(s) connected with it. This course is available to both SACE and IB students who have completed Year 10 Chinese.

The Chinese B programme focuses primarily on preparing the learner to use the language appropriately in a range of situations and contexts and for a variety of purposes.

Receptive, productive, and interactive macro skills – listening, speaking, reading and writing – are developed through the study of a wide range of oral and written texts as well as visual and audio stimuli of different styles and registers. Authentic materials are used wherever possible and students are given maximum exposure to the target language. Higher Level also has a literature component.

The teaching of an appropriate range of grammatical structures is integrated as far as possible with the study of themes and texts and the acquisition of the three macro skills.

The simplified Chinese character writing system developed and used in the People's Republic of China is used in written resources and tests.

**Assessment:**

**External Assessment (75%)**

Examination Paper 1: Productive skills 25%

- Writing (30 marks)

Examination Paper 2: Receptive skills 50%

- Listening comprehension (25 marks)
- Reading comprehension (40 marks)

**Internal Assessment (25%)**

- Individual Oral (30 marks)

**HL:** Invitation only in Year 12.

## English B (Higher Level)

## Group 2

**Course Description:** Language B Higher Level is language acquisition for students with some previous experience of learning the language. While studying the language students also explore the culture(s) connected with it. This course is available to both SACE and IB students.

The main focus of the course is on language acquisition and development. The English B program focuses principally on preparing the learning to use the language appropriately in a range of situations and contexts and for a variety of purposes.

Receptive, productive, and interactive macro skills – listening, speaking, reading and writing – are developed through the study of a wide range of oral and written texts as well as visual and audio stimuli of different styles and registers. Authentic materials are used wherever possible and students are given maximum exposure to the target language. There is a literature component that further extends students abilities to engage with more complex literary texts.

The teaching of an appropriate range of grammatical structures is integrated as far as possible with the study of themes and texts and the acquisition of the three macro skills.

**Assessment:**

**External Assessment (75%)**

Examination Paper 1: Productive skills 25%

- Writing (30 marks)

Examination Paper 2: Receptive skills 50%

- Listening comprehension (25 marks)
- Reading comprehension (40 marks)

**Internal Assessment (25%)**

- Individual Oral (30 marks)

**French B (Standard and Higher Level)****Group 2**

**Course Description:** Language B Standard and Higher Level language acquisition for students with some previous experience of learning the language. While studying the language students also explore the culture(s) connected with it. This course is available to both SACE and IB students who have completed Year 10 French.

The French B focuses primarily on preparing the learner to use the language appropriately in a range of situations and contexts and for a variety of purposes.

Receptive, productive, and interactive macro skills – listening, speaking, reading and writing – are developed through the study of a wide range of oral and written texts as well as visual and audio stimuli of different styles and registers. Authentic materials are used wherever possible and students are given maximum exposure to the target language. Higher Level also has a literature component.

The teaching of an appropriate range of grammatical structures is integrated as far as possible with the study of themes and texts and the acquisition of the three macro skills.

**Assessment:****External Assessment (75%)**

Examination Paper 1: Productive skills 25%

- Writing (30 marks)

Examination Paper 2: Receptive skills 50%

- Listening comprehension (25 marks)
- Reading comprehension (40 marks)

**Internal Assessment (25%)**

- Individual Oral (30 marks)

**HL:** Invitation only in Year 12.

**Italian B (Standard Level)****Group 2**

**Course Description:** Language B Standard and Higher Level language acquisition for students with some previous experience of learning the language. While studying the language students also explore the culture(s) connected with it. This course is available to both SACE and IB students who have completed Year 10 Italian.

The Italian B programme focuses primarily on preparing the learner to use the language appropriately in a range of situations and contexts and for a variety of purposes.

Receptive, productive, and interactive macro skills – listening, speaking, reading and writing – are developed through the study of a wide range of oral and written texts as well as visual and audio stimuli of different styles and registers. Authentic materials are used wherever possible and students are given maximum exposure to the target language. Higher Level also has a literature component.

The teaching of an appropriate range of grammatical structures is integrated as far as possible with the study of themes and texts and the acquisition of the three macro skills.

**Assessment:****External Assessment (75%)**

Examination Paper 1: Productive skills 25%

- Writing (30 marks)

Examination Paper 2: Receptive skills 50%

- Listening comprehension (25 marks)
- Reading comprehension (40 marks)

**Internal Assessment (25%)**

- Individual Oral (30 marks)

## Spanish *ab initio* (Standard Level)

## Group 2

**Course description:** The Spanish *ab initio* course is a language acquisition course for students with little or no experience of Spanish. This course is available to both SACE and IB students.

The main focus of the course is on language acquisition and development. The *ab initio* Spanish programme focuses principally on preparing the learner to use the language appropriately in a range of situations and contexts and for a variety of purposes.

Receptive, productive, and interactive macro skills – listening, speaking, reading and writing – are developed through the study of a wide range of oral and written texts as well as visual and audio stimuli of different styles and registers. Authentic materials are used wherever possible and students are given maximum exposure to the target language.

The teaching of an appropriate range of grammatical structures is integrated as far as possible with the study of topics and texts and the acquisition of the three macro skills.

**Assessment:**

**External Assessment (75%)**

Examination Paper 1: Productive skills 25%

- Writing (30 marks)

Examination Paper 2: Receptive skills 50%

- Listening comprehension (25 marks)
- Reading comprehension (40 marks)

**Internal Assessment (25%)**

- Individual Oral (30 marks)

## Economics (Standard Level)

## Group 3

**Course Description:** The Economics course is broken into the following sections: Microeconomics; Macroeconomics; the Global Economy.

The study of economics is essentially about dealing with scarcity, resource allocation and the methods and processes by which choices are made in the satisfaction of human wants. As a dynamic social science, economics uses scientific methodologies that include quantitative and qualitative elements.

The course emphasizes the economic theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not to be studied in a vacuum - rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability. Students will acquire a broad and deep knowledge of these elements of the discipline.

**Assessment:**

**External Assessment (70%)**

Examination Paper 1 (30%): One extended response question from a choice of three. Covers all syllabus content.

Examination Paper 2 (40%): One data-response question from a choice of two. Covers all syllabus content.

**Internal Assessment (30%)**

Portfolio of three commentaries based on different sections of the syllabus. Each commentary is an analysis of a real-world issue based on a news media article chosen by the student.

## Economics (Higher Level)

## Group 3

**Course description:** The Higher-Level Economics course covers the same core material as the Standard Level course including the demand-supply model, market failure, macroeconomic objectives and policies and global trade and development.

The HL course extends this in several key areas including:

- Theory of the Firm – understanding market structures (e.g. monopoly, oligopoly) and firm decision making
- Behavioural Economics
- Advanced Monetary Policy including Quantitative Easing
- Advanced Balance of Payments analysis in International Economics.

**Assessment:**

**External Assessment (80%)**

Examination Paper 1 (20%): One extended response question from a choice of three.

Examination Paper 2 (30%): One data-response question from a choice of two.

Examination Paper 3 (30%): Two compulsory policy analysis and recommendation questions.

**Internal Assessment (20%)**

Portfolio of three commentaries based on different sections of the syllabus. Each commentary is an analysis of a real-world issue based on a news media article chosen by the student.

## Geography (Standard Level)

## Group 3

**Course Description:** Students will study both the Geophysical and the Human Development factors in Geography. Emphasis is placed upon the overall sustainability of the regions covered. Case studies are used to explore the impacts of decisions globally. The course is divided into three distinct sections: The Patterns and Change of countries, Coastal Environments and Urban Environments. The course does contain a practical element with Fieldwork Skills being applied for the Internal Assessment.

**Assessment:**

**External Assessment (75%)**

Examination Paper 1: Short answer and medium length structured responses 35%

Examination Paper 2: Short answer and extended responses using a stimuli 40%

**Internal Assessment (25%)**

Fieldwork Report – Group Data Collection

## Geography (Higher Level)

## Group 3

**Course Description:** Students will study both the Geophysical and the Human Development factors in Geography. Emphasis is placed upon the overall sustainability of the regions covered. A case study approach is used to explore the impacts of decisions globally. The course is divided into five distinct sections: The Patterns

and Change of countries, Coastal Environments, Urban Environments, Food & Health and The Nature of Global Interactions. The course does contain a practical element with Fieldwork Skills being applied for the Internal Assessment.

**Assessment:**

**External Assessment (80%)**

Examination Paper 1: Short answer and longer responses 35%

Examination Paper 2: Short answer and extended responses 25%

Examination Paper 3: Paper focused on the Higher-Level Global Interactions 20%

**Internal Assessment (20%)**

Fieldwork Report – Group Data Collection

## History (Standard Level)

## Group 3

**Course Description:** Students will critically engage with a range of historical sources related to the prescribed subject: The Move to Global War (Italy and Japan). Two major thematic studies encompass preparation for Examination Paper 2 in order to develop an understanding of historical processes. These are: the Authoritarian States (Adolf Hitler, Mao Zedong and Benito Mussolini); and The Cold War: superpower tensions and rivalries.

**Assessment:**

**External Assessment (75%)**

Examination Paper 1: Four short-answer/structured questions 30%

Examination Paper 2: Two extended-response questions 45%

**Internal Assessment (25%)**

Historical Investigation

## History (Higher Level)

## Group 3

**Course Description:** Students will critically engage with a range of historical sources related to the prescribed subject: The Move to Global War (Italy and Japan). Two major thematic studies encompass preparation for Examination Paper 2 in order to develop an understanding of historical processes. These are: the Authoritarian States (Adolf Hitler, Mao Zedong and Benito Mussolini); and The Cold War: superpower tensions and rivalries.

The European opposition forces to be studied as part of the HL course, are Europe in the First World War (1871-1918), Inter-war domestic developments in European states (1918 – 1939) and Diplomacy in Europe (1919-1945).

**Assessment:**

**External Assessment (80%)**

Examination Paper 1: Four short-answer/structured questions 20%

Examination Paper 2: Two extended-response questions 25%

Examination Paper 3: Three extended-response questions 35%

**Internal Assessment (20%)**

Historical Investigation

## Biology (Standard Level)

## Group 4

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**Course Description:** During the first year of the course students will study core topics from the following list: Cell Biology, Molecular Biology, Genetics, Ecology, Evolution and Biodiversity and Human Physiology.

Opportunities will be provided to incorporate aspects of the Higher Level topics in the teaching and learning program to facilitate development of knowledge, understanding and skills required at the additional higher level.

An additional option topic is chosen from: Neurology and Behaviour, Biotechnology and Bioinformatics, Ecology and Conservation and Human Physiology.

### **Assessment:**

#### **External Assessment (80%)**

Examination Paper 1 20% - Multiple Choice

Examination Paper 2 40% - Data Based Questions

Examination Paper 3 20% - Option

#### **Internal Assessment (20%)**

One practical report which will be assessed on Personal Engagement, Exploration, Analysis, Evaluation and Communication.

Students must also take part in a Group 4 Project of 10 hours.

## Biology (Higher Level)

## Group 4

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**Course Description:** The course consists of eleven core topics and one option topic. During the first year of the course students will study core topics from the following list: Cell Biology, Molecular Biology, Genetics, Ecology, Evolution and Biodiversity and Human Physiology.

Additional Higher Level topics to be studied are: Nucleic acids, Metabolism, Plant Biology, Cell Respiration and Photosynthesis, Genetics and Evolution, and Animal Physiology.

The option topic is chosen from: Neurology and Behaviour, Biotechnology and Bioinformatics, Ecology and Conservation and Human Physiology.

### **Assessment:**

#### **External Assessment (80%)**

Examination Paper 1 20% - Multiple Choice

Examination Paper 2 36% - Data Based Questions

Examination Paper 3 24% - Option

#### **Internal Assessment (20%)**

One practical report which will be assessed on Personal Engagement, Exploration, Analysis, Evaluation and Communication.

Students must also take part in a Group 4 Project of 10 hours.



## Chemistry (Standard Level)

Group 4

**Course Description:** The course consists of eleven core topics and one option topic. The core topics are: Stoichiometric Relationships, Atomic Structure, Periodicity, Bonding, Energetics, Kinetics, Equilibrium, Acids and Bases, Oxidation and Reduction, Organic Chemistry and Measurement.

The Option topics are chosen from: Materials, Biochemistry, Energy and Medicinal Chemistry.

**Assessment:**

**External Assessment (80%)**

Examination Paper 1 20%

Examination Paper 2 40%

Examination Paper 3 20%

**Internal Assessment (20%)**

One summative investigation of 10 hours duration is required. A further 30 hours of practical work is required.

## Chemistry (Higher Level)

Group 4

**Course Description:** The course consists of twenty-one core topics and one option topic. The single core topic is: stoichiometric relationships. The double core units are: Atomic Structure, Periodicity, Bonding, Energetics, Kinetics, Equilibrium, Acids and Bases, Oxidation and Reduction, Organic Chemistry and Measurement.

The Option topics are chosen from: Materials, Biochemistry, Energy and Medicinal Chemistry.

**Assessment:**

**External Assessment (80%)**

Examination Paper 1 20%

Examination Paper 2 36%

Examination Paper 3 24%

**Internal assessment (20%)**

One summative practical investigation of 10 hours duration is required. A further 50 hours of practical work is required.

## Physics (Standard Level)

Group 4

**Course Description:** The course consists of eight core topics and one option topic. The core topics are: measurement, mechanics, waves, thermal physics, electricity and magnetism, circular motion and gravitation, atomic nuclear and particle physics, energy production.

The option topic is chosen from: Relativity, engineering physics, imaging, astrophysics. One option must be completed.

**Assessment:**

**External Assessment (80%)**

Examination Paper 1 20%

Examination Paper 2 40%

Examination Paper 3 20%

**Internal Assessment (20%)**

One individual scientific investigation requiring about 10 hours of work will be assessed. 30 additional hours of practical work must be completed but is not assessed.

## Physics (Higher Level)

## Group 4

**Course Description:** The course consists of 8 core, 4 additional Higher Level topics and one option topic. The core topics are: measurement, mechanics, waves, thermal physics, electricity and magnetism, circular motion and gravitation, atomic nuclear and particle physics, energy production. The additional Higher Level topics are wave production, fields, electromagnetic induction, quantum and nuclear physics.

The option topic is chosen from: Relativity, engineering physics, imaging, astrophysics. One option must be completed.

### Assessment:

#### External Assessment (80%)

Examination Paper 1 20%

Examination Paper 2 36%

Examination Paper 3 24%

#### Internal Assessment (20%)

One individual scientific investigation requiring about 10 hours of work will be assessed. 50 additional hours of practical work must be completed but is not assessed.

## Sport, Exercise and Health Science (Standard and Higher Level)

## Group 4

**Course Description:** Sport, Exercise & Health Science explores the principles of anatomy and human physiology required for excellence in sport. Students will study six core topics; Anatomy, Exercise Physiology, Energy Systems, Movement Analysis, Skill in Sport and Measurement & Evaluation of Human Performance.

In addition, students will study two elective options from: Nutrition for Sport and Health, Optimizing Physiological; and Performance and Psychology of Sport.

Students will conduct a range of practical investigations and laboratory reports during each topic to enhance their learning.

### Assessment:

#### External Assessment (80%)

Examination Paper 1 (multiple choice) Core topics

Examination Paper 2 (short answer) Core Topics

Examination Paper 3 (short answer) Option Topics

#### Internal Assessment (20%)

Individual Investigation (10 hours) - A long term practical investigation into a topic of the student's choice.

#### Higher Level Course (HL)

Sport, Exercise & Health Science is also offered at Higher Level. Students who undertake this course of study will complete the same syllabus content as that explored in the Standard Level course, however several additional topics are included. Some Standard Level topics are also covered more extensively. The Higher Level course also requires an additional 20 hours of practical work and therefore several additional investigations will be conducted.

The assessment of the Higher Level course follows the same format as the Standard Level course but, includes additional sections in each examination booklet. Higher Level students complete the same Individual Investigation as Standard Level students.

**Course Description:** Design Technology utilises the product design cycle to focus on analysis, design development, synthesis and evaluation, balancing theory and practice as a subject within the Diploma Programme Sciences subject group. Design Technology requires the use of the design cycle as a tool, which provides the methodology used to structure the development and testing of design products/solutions, underpinned by inquiry and analysis of design problems. A product or solution can be defined as a model, prototype, product or system that students have developed independently, and students' work may incorporate a range of timber, metal, plastics and composite materials as well as practical application of 3D CAD/CAM technologies.

Theory content will include:

- Human factors and ergonomics
- Resource management and sustainable production
- Modelling
- Raw material to final product
- Innovation and design
- Classic design

### Assessment:

#### External Assessment (60%)

Examination Paper 1 (multiple choice) Core topics

Examination Paper 2

- Section A: one data-based question and several short-answer questions on the core material (all compulsory)
- Section B: one extended-response question on the core material (from a choice of three).

[Higher Level only] Examination Paper 3

- Section A: two structured questions on the HL extension material, both compulsory
- Section B: one structured question on the HL extension material based on a case study.

#### Internal Assessment (40%)

All Standard and Higher Level students complete a design project as an internal assessment task. This design project allows them to demonstrate their investigative, analytical, design thinking, design development, prototyping, testing and evaluation skills and mirrors the design processes used across the various industries that integrate design practice. Internal assessment accounts for 40% of the final assessment.

#### Higher Level Course (HL)

**HL Students** will additionally examine the following topics:

- User-centred design (UCD)
- Sustainability
- Innovation and markets
- Commercial production

**Course Description:** Mathematics: analysis and approaches is designed to allow students to develop strong skills in mathematical thinking and becoming fluent in the construction of mathematical arguments. These students will be likely to have a significant mathematical component to their future studies.

This course recognises the need for knowledge analytical techniques to operate effectively in areas of innovation which depend on a deep understanding of mathematics. The focus of this course is to develop a wide range of algebraic and analytical techniques, focussing on pure mathematics rather than practical applications.

Mathematics: Analysis and Approaches emphasises the ability to construct, communicate and justify correct mathematical arguments with or without the use of technology.

Course specific content includes:

- Sequences and series
- Functions and their graphs including linear, exponential, direct and inverse variation and sinusoidal models
- Deductive proof
- Right and non-right-angled trigonometry including double angle identities
- Statistics and probability including normal and binomial distributions and linear regression
- Conditional probabilities and independent events
- Standardisation of normal distributions
- Differential and integral calculus including chain, product and quotient rules, second derivatives, graphical behaviour, definite integrals and areas between curves.
- Counting principles (HL)
- Partial fractions (HL)
- Complex numbers (HL)
- Proof by induction (HL)
- Additional functions and graphs (HL)
- Further trigonometric identities (HL)
- Vectors (HL)
- Variance and standard deviation of random variables including linear transformations (HL)

The level of abstraction in this course will suit those students with strong algebraic skills and a commitment to further developing mathematical ways of thinking. It is intended for students who will go on to study subjects with substantial mathematics content at university (e.g. Mathematics, Engineering, Economics, Physical Sciences such as Physics and Chemistry).

To be successful in Mathematics: Analysis and Approaches at Standard Level, students need to have passed Year 10 Mathematics, with a recommended B grade.

The pre-requisite for Higher Level in this course is a B grade achievement in both Year 10 and 10 Advanced Mathematics.

## Assessment

### Standard Level:

#### External Assessment (80%)

Examination Paper 1 - no technology 40%

Examination Paper 2 - technology allowed 40%

#### Internal Assessment (20%)

Mathematical Exploration

### Higher Level:

#### External Assessment (80%)

Examination Paper 1 - no technology 30%

Examination Paper 2 - technology allowed 30%

Examination Paper 3 - technology allowed 20%

#### Internal Assessment (20%)

Mathematical Exploration

**Course Description:** Mathematics: applications and interpretation utilises an approach to teaching and learning centred on applying mathematics to solve problems in a variety of practical contexts.

This course recognises the role that mathematics plays in a diverse range of fields and emphasises the application of mathematics to real world problems, mathematical modelling and the interpretation of mathematical results in context.

There is extensive use of technology to solve problems and construct mathematical models in this course.

Many of the topics in this course are those traditionally used in applied mathematical approaches, along with elements of pure mathematical topics which enable students to develop a strong base to support their mathematical thinking. These include:

- Sequences and series and their financial applications
- Modelling with functions and their graphs including linear, exponential, direct and inverse variation, logarithmic and sinusoidal models
- Applications of right and non-right-angled triangles including bearings, angles of depression and elevation
- Applications of statistics and probability including normal and binomial distributions and linear regression
- Comparisons of correlation coefficients
- Null and alternate hypotheses and testing
- Applications of differential and integral calculus
- Laws of Logarithms (HL only)
- Vectors (HL only)
- Matrices (HL only)
- Non-linear regression (HL only)
- Poisson distribution (HL only)
- Further differentiation of functions and differential equations (HL only)

This course is aimed at students who are looking to pursue careers which will not include a focus on mathematical analysis.

The Standard Level of Mathematics: Analysis and Approaches has no pre-requisites.

Note – the Higher Level option for this course will only be offered subject to sufficient student demand. The pre-requisite for HL would be a B grade achievement in Year 10 and a pass in 10 Advanced Mathematics.

## Assessment:

### Standard Level:

#### External Assessment (80%)

Examination Paper 1 - technology allowed 40%

Examination Paper 2 - technology allowed 40%

#### Internal Assessment (20%)

Mathematical Exploration

### Higher Level:

#### External Assessment (80%)

Examination Paper 1 - technology allowed 30%

Examination Paper 2 - technology allowed 30%

Examination Paper 3 - technology allowed 20%

#### Internal Assessment (20%)

Mathematical Exploration

**Course Description:** The IBDP Film course consists of three parts, all of which are compulsory: Film Production, Film Theory & History, and Film Analysis.

Film is both an industry and an art form. The IBDP Film course aims to develop students' skills so that they become adept in both interpreting and making film texts.

With practical work students are introduced to the production processes, concepts and techniques of film-making, including the use of technology and equipment. The IB Film course emphasises the importance of working individually and as a member of a group. Students are encouraged to develop the professional and technical skills (including organizational skills) needed to express themselves creatively in film. A challenge for students following this course is to become aware of their own perspectives and biases and to learn to respect those of others. This requires a willingness to have an open and critical mind.

The close textual analysis of films and film cultures, through the exploration of film history and genres, introduces students to traditions and cultures outside their own, as well as building strong visual literacy competencies. Through the study of film texts the course explores film history, theory and cultural contexts. The course develops students' critical abilities, enabling them to appreciate the diversity of cultural and historical perspectives in film. Ultimately the course aims to develop a lifelong appreciation of film.

While IB Film is not necessarily a precursor to tertiary study in Film and/or Media, the structure and content of the course certainly places students who are interested in these fields in a position of advantage in terms of knowledge and ability.

### **Assessment:**

#### **Internal Assessment: Production Portfolio (SL 40% / HL 25%)**

Students at SL and HL undertake a variety of film-making exercises in three film production roles, led by clearly defined filmmaker intentions. They acquire and develop practical skills and techniques through participation in film exercises, experiments and the creation of at least one completed film. Students submit the following.

- Portfolio pages (9 pages maximum: 3 pages maximum per film production role) and a list of all sources used.
- A film reel (9 minutes maximum: 3 minutes maximum per film production role, including one completed film).

#### **External Assessment: Comparative Study (SL 30% / HL 20%)**

Students at SL and HL carry out research into a chosen area of film focus, identifying and comparing two films from within that area and presenting their discoveries as a recorded multimedia comparative study. Students submit the following.

- A recorded multimedia comparative study (10 minutes maximum).
- A list of all sources used

#### **External Assessment: Textual Analysis Essay (SL 30% / HL 20%)**

Students at SL and HL demonstrate their knowledge and understanding of how meaning is constructed in film. They do this through a written analysis of a prescribed film text based on a chosen extract (lasting no more than five minutes) from that film. Students consider the cultural context of the film and a variety of film elements. Students submit the following.

- A textual analysis (1,750 words maximum) and a list of all sources used.

#### **Collaborative Film Project (HL Only 35%)**

Bringing together all they have encountered during the film course, students at HL work collaboratively in a core production team to plan and create an original completed film. Students submit the following.

- A completed film (7 minutes maximum).
- A project report (2,000 words maximum) and a list of all sources used.

**All Year 11 Drama students will study the SACE Stage 1 Drama course, which acts as a foundation for either SACE Stage 2 Drama or IB Theatre in Year 12.**

**Course Description:** The IB Theatre programme is an exciting, multifaceted course of study. It offers students the opportunity to make theatre as creators, designers, directors and performers. It emphasises the importance of working practically and theoretically, both individually and collaboratively as part of an ensemble, and the course also gives students the opportunity to engage actively in the creative process - transforming ideas into action as inquisitive and productive artists.

Through the study of theatre, students become very aware of their own personal and cultural perspectives. They develop an appreciation of the diversity of theatre practices, process and modes of presentation. IB Theatre enables students to discover and engage with different forms of theatre across time, place and nationalities.

**Pre-requisites:** The IB Theatre course focuses on developing and refining the skills learned in Drama in Years 7-10. Students are advised that the study of Drama in Year 10 will provide a strong foundation for learning in Year 11 and 12 although it is not essential.

## Core Areas of Study

The theatre syllabus at SL and HL consists of three equal, interwoven areas:

- Theatre in Context
- Theatre in Process
- Presenting Theatre

## Assessment

Assessment takes place in the second year of the course (Year 12). The following tasks (1-3) are externally assessed:

### Task 1: Solo Theatre Piece (HL only) 35%

Students at HL research a theatre theorist they have not previously studied and create and present a solo theatre piece (4-8 minutes) based on an aspect(s) of this theory. This task requires students to create a fully produced piece of theatre based on theory alone. Students submit a report (maximum 3000 words) which includes their research into and understanding of the theorist, the theory and the context of the theorist's work. It also records their practical explorations of the selected aspect(s) of theory, the development of the solo theatre piece and analysis and evaluation of the solo theatre piece.

### Task 2: Director's Notebook (SL: 35%, HL: 20%)

Students at HL and SL independently choose a published play text, read the text and record their personal responses. The aim of this task is for students to explore the processes involved in transforming a play text into live action from the perspective of a director by developing a clear directorial vision for staging the play they choose. They then:

- Research and record the cultural and/or theoretical context of the play and identify concepts;
- Explore the play and record their own ideas of how this play might be staged;
- Reference live performances they have experienced and how these have influenced, inspired and informed their directing of key moments in the play.

The entire process is recorded and presented in the form of a director's notebook (20 pages maximum) of visuals and words, which are essentially the best bits of the class logbook that we use in Years 7-12. It is a theoretical exercise. The play is not actually staged as part of the assessment task though a student may choose to work practically as part of the process of exploring the play or examining particular moments. Students are not permitted to alter, edit or make additions to the play they choose to study.

**Task 3: Research Presentation (SL: 30%; HL: 20%)**

Students at HL and SL plan and deliver an individual presentation (15 minutes maximum) to their peers in which they outline their research and exploration of a theatre tradition they have not previously studied (selected from a prescribed list). Students approach this task from the perspective of the performer. Students research the cultural and/or theoretical context of the selected theatre tradition and identify one performance convention from this tradition to explore practically and physically. The presentation must include a physical demonstration of the student's exploration of the performance style, and its application to a moment of theatre. The student then reflects on the impact this has had on them as a performer. Students submit a continuous unedited video recording of the live presentation (15 minutes) and a list of sources, as well as any additional resources they have used in their presentation.

**Internal Assessment****Task 4: Collaborative Project (SL and HL: 25%)**

Students at SL and HL collaboratively create and present an original devised piece of theatre lasting 13-15 minutes for and to a specified target audience, created from a starting point of their choice.

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**Music (Standard Level)****Group 6**

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**All Year 11 Music students will study the SACE Stage 1 Music Advanced course, which acts as a foundation for SACE Music Studies, Music Performance: Solo/Ensemble and IB Music in Year 12.**

**Course Description:** In this course, students and teachers engage in a journey of imagination and discovery through partnership and collaboration. Students develop and affirm their unique musical identities while expanding and refining their musicianship.

Throughout the course, students are encouraged to explore music in varied and sometimes unfamiliar contexts. Additionally, by experimenting with music, students gain hands-on experience while honing musical skills. Through realizing and presenting samples of their musical work with others, students also learn to communicate critical and artistic intentions and purpose.

As students develop as young musicians, the course challenges them to engage practically with music as researchers, performers and creators, and to be driven by their unique passions and interests while also broadening their musical and artistic perspectives.

**Assessment:****External Assessment (70%)**

Exploring music in context 30% - 2400-word portfolio. Mix of performing, composing and written work.

Presenting music 40% - One presentation each as a researcher, creator and performer (solo and/or ensemble).

**Internal Assessment (30%)**

Experimenting with music 30% - 1500-word report. Evidence via three creations (5 mins total) and three performances (5 mins total).

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**Music (Higher Level)****Group 6**

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**All Year 11 Music students will study the SACE Stage 1 Music Advanced course, which acts as a foundation for SACE Music Studies, Music Performance: Solo/Ensemble and IB Music in Year 12.**

**Course Description:** In this course, students and teachers engage in a journey of imagination and discovery through partnership and collaboration. Students develop and affirm their unique musical identities while expanding and refining their musicianship.

Throughout the course, students are encouraged to explore music in varied and sometimes unfamiliar



contexts. Additionally, by experimenting with music, students gain hands-on experience while honing musical skills. Through realizing and presenting samples of their musical work with others, students also learn to communicate critical and artistic intentions and purpose.

As students develop as young musicians, the course challenges them to engage practically with music as researchers, performers and creators, and to be driven by their unique passions and interests while also broadening their musical and artistic perspectives.

**Assessment:**

**External Assessment (50%)**

Exploring music in context 20% - 2400-word portfolio. Mix of performing, composing and written work.

Presenting music 30% - One presentation each as a researcher, creator and performer (solo and/or ensemble).

**Internal Assessment (50%)**

Experimenting with music 20% - 1500-word report. Evidence via three creations (5 mins total) and three performances (5 mins total).

The contemporary music-maker 30% - 15-minute multimedia presentation.

## Visual Arts (Standard Level)

## Group 6

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**Course Description:** The Visual Arts course consists of the three parts, all of which are compulsory:

Part 1: Comparative Study 20%

Part 2: Process Portfolio 40%

Part 3: Exhibition 40%

**Course Aim:** Visual Arts 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 as art/design makers. Visual Arts fosters the production of creative visual communication, relevant to visual marketing, visual artist/design practice, visual entertainment industries, and creative thinking in a diverse range of higher education and career pathways.

**Comparative study:** Students critically analyse and compare different art/design works by different art/design artists from differing cultural contexts.

**Process Portfolio:** Students submit carefully selected materials which evidence their experimentation, exploration, manipulation and refinement of a variety of art/design experiences from their visual arts journal pages. Investigation pages provide an opportunity for reflection and discovery and they play a key role in allowing ideas to take shape and grow.

**Exhibition:** Students experience a variety of different art/design making and conceptual forms including, drawing, sculpture, painting, graphic design, printmaking and architecture. Students select resolved artworks for their own exhibition which is supported by a curatorial rationale. SL students will work with and then specialise in at least two art/design making forms.

**Assessment:**

**External Assessment (SL: 60%)**

Comparative Study 20%: Compare at least 3 different art/design works by at least 2 different artists/designers with commentary over 10-15 screens.

Process Portfolio 40%: 9-15 screens, and the work submitted should be in at least two different art-making forms.

**Internal Assessment (SL: 40%)**

Exhibition 40%: 4-7 pieces with exhibition text for each and a curatorial rationale (400 words max.)

**Course Description:** The Visual Arts course consists of the three parts, all of which are compulsory:

Part 1: Comparative Study 20%

Part 2: Process Portfolio 40%

Part 3: Exhibition 40%

**Course Aim:** Visual Arts 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 as art/design makers. Visual Arts fosters the production of creative visual communication, relevant to visual marketing, visual artist/design practice, visual entertainment industries, and creative thinking in a diverse range of higher education and career pathways.

**Comparative study:** Students critically analyse and compare different art/design works by different art/design artists from differing cultural contexts.

**Process Portfolio:** Students submit carefully selected materials which evidence their experimentation, exploration, manipulation and refinement of a variety of art/design experiences from their visual arts journal pages. Investigation pages provide an opportunity for reflection and discovery and they play a key role in allowing ideas to take shape and grow.

**Exhibition:** Students experience a variety of different art/design making and conceptual forms including, drawing, sculpture, painting, graphic design, printmaking and architecture. Students select resolved artworks for their own exhibition which is supported by a curatorial rationale. HL students will work with and then specialize in at least three art/design making forms.

### **Assessment:**

#### **External Assessment (HL: 60%)**

**Comparative Study 20%:** Compare at least 3 different art/design works by at least 2 different artists/designers with commentary over 10-15 screens. Plus, at HL, a reflection on the extent to which their art/design work and practices have been influenced by any of the art/design/artists/designers examined in 3-5 screens.

**Process Portfolio 40%:** 13-25 screens, and the work submitted should be in at least three different art-making forms.

#### **Internal Assessment (HL: 40%)**

**Exhibition 40%:** 8-11 pieces with exhibition text for each and a curatorial rationale (700 words max.)

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## Theory of Knowledge

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**Duration:** Six terms

**Course Description:** Theory of Knowledge (ToK) encourages students to reflect upon knowledge generally: how it is produced, how different kinds of knowledge operate and how each of us is personally implicated in the knowledge we encounter and work with. Through these reflections, students have the opportunity to try to examine the significance of all their studies and knowledge involvements - to try to stand apart from, and analyse, how knowledge affects the particular circumstances and purposes of their lives.

At school, students study a range of subjects, all teaching them different kinds of thought, method and knowledge. ToK looks at how these subjects relate to each other, where particular approaches are most useful, how different approaches have different criteria of truthfulness, how different approaches entail specific problems of knowledge. Students are encouraged to explore their involvement with knowledge, as both a practical and a scholastic undertaking, by asking questions and making connections across their whole educational experience.

By comparatively evaluating different methodological, theoretical, ethical, cultural and personal concerns, students develop a much more detailed understanding of the diversity of knowledge and how it shapes us. In turn, students become more alert to how personal characteristics affect our relationship to knowledge. Examining their involvement with knowledge in this way not only helps students to cultivate critical awareness, but teaches them how to articulate their views in terms of coherent and effectively justified analytical arguments.

ToK strives to cultivate in students a discerning judgement as to how to assess knowledge and how different kinds of knowledge may best be used. In consequence, ToK is an inquiry into the ramifications of knowledge with regard to all the various international, intercultural and global issues in which each of us is implicated. By becoming aware of the inherently conditional, and often culturally specific, character of knowledge a student develops a greater intellectual humility, likely to enhance the accuracy of their judgement, the openness of their perspective and the breadth of their understanding.

**Assessment:** The combination of a student's performance in ToK and the Extended Essay comprises a score out of 3 points in the overall Diploma score. ToK itself is scored out of 30 marks as follows:

**External Assessment (20 marks)**

Essay: 1600 words - An analytical examination of a prescribed topic selected from a list of 6.

**Internal Assessment (10 marks)**

Exhibition: Students to individually choose and exhibit 3 objects, curated by means of 300 word written commentaries relating each object to a prompt chosen from a prescribed list of 35.

# SACE Stage 1 Subjects

## Stage 1 English

(20 Credits)

**NOTE:** Students must study a full-year Stage 1 English course to meet the SACE literacy requirements. Students need to achieve a C Grade or higher in this subject to achieve the SACE literacy requirements

**Course Description:** This course focuses on extending confidence in reading and viewing, by building knowledge, understanding and skills through the deconstruction and analysis of a wide range of printed, film, electronic and media texts. Students learn that texts and language are composed and read in a range of social and cultural situations, as well as recognise the conventions of different text types. The course is divided into the following three areas:

- Reading and responding to texts - students explore a range of texts composed for different purposes and in a range of forms.
- Producing texts - students explore a range of text types composed for different purposes and audiences.
- Extended study - provides an opportunity for students to develop an awareness of the place and power of language and texts in social and cultural contexts.

**Assessment (Internal):**

Text Analysis 50%

Text Production 30%

Extended Study 20%

## Stage 1 English Literary Studies

(20 Credits)

**NOTE:** Students must study a full-year Stage 1 English course to meet the SACE literacy requirements. Students need to achieve a C Grade or higher in this subject to achieve the SACE literacy requirements

**Course Description:** This course focuses on building knowledge, understanding and skills through the reading of a wide range of literary texts. Students learn that texts and language are composed and read in a range of social and cultural situations, as well as recognise the conventions of different text types. The course is divided into the following areas:

- Reading and responding to texts – students explore a range of texts composed for different purposes and in a range of forms.
- Producing texts - students explore a range of text types composed for different purposes and audiences.
- Extended study - provides an opportunity for students to develop an awareness of the place and power of language and texts in social and cultural contexts.
- Language Study – students focus on an aspect of language used in a context beyond the classroom.

**Assessment (Internal):**

Text Analysis 60%

Text Production 20%

Extended Study 20%

## Stage 1 Essential English

(20 Credits)

This course is only occasionally offered as a non-standard alternative to English in Stage 1. Only those students who require additional scaffolding with the fundamentals of English outside of the mainstream, are invited on a need's basis in consultation with English faculty members and Academic Support.

## Stage 1 Accounting

(20 Credits)

**Course Description:** The Accounting course consists of a core topic 'The Environment of Accounting' and at least four option topics.

'The Environment of Accounting' introduces students to the basic concepts and principles of Accounting. This topic gives students opportunities to develop knowledge of: Accounting and its function in a society; The regulatory and conceptual frameworks of accounting; The needs of internal and external stakeholders; Social, ethical, and technological issues; The impacts of past, present, and possible future accounting decisions.

The option topics selected are: Double-entry Recording; Financial Reports; Analysis and Interpretation of Financial Reports; Balance Day adjustments; Cash budgets and Cashflow statements.

**Assessment:**

Skills and Applications Tasks 25%

Investigation 25%

Examinations 50%

## Stage 1 Business Innovation

(20 Credits)

**Course Description:** The Business Innovation course aims to develop an understanding of Business contexts. Students will investigate and report on the opportunities and challenges associated with the legal frameworks of business, human resourcing in business, regulatory obligations of organisations and appropriate occupational health and safety. Through the analysis of a business plan the responsibilities and impacts of proposed business models will be analysed.

**Assessment:**

Assessment Type 1 Business Skills Tasks 40%

Assessment Type 2 Business Pitch(s) 40%

Examinations (Business Skills Tasks) 20%

## Stage 1 Economics

(20 Credits)

**Pre-requisite:** Satisfactory completion of Year 10 History

**Course description:** Economics is the study of how society uses its scarce resources. Students build an awareness of how markets operate for individual goods and services (microeconomics), how different market structures (e.g. monopoly and oligopoly) affect the distribution of resources and the role that government may play. This is conducted through the lens of the demand-supply model.

In macroeconomics students learn about the circular flow of income in the economy and the macroeconomic objectives of economic growth, full employment and low and stable inflation.

Students are exposed to all the key skills of the economics discipline including use of economic models, data analysis and research. This provides valuable skills and knowledge for careers in both the private sector, academia and the public sector.

**Assessment:**

Skills and Applications Tasks 50%

Investigation 20%

Examinations 30%

## Stage 1 Geography

(20 Credits)

**Pre-requisite:** Satisfactory completion of Year 10 Geography

**Course Description:** This course is an approved SACE Stage 1 Course that follows the IBDP Geography SL curriculum. Students will study both the Geophysical and the Human Development factors in Geography. Emphasis is placed upon the overall sustainability of the topics and regions covered throughout the course with a case study approach used to examine the impacts of decisions globally. The course is divided into 3 distinct sections; The Patterns and Change of countries, Coastal Environments and Urban Environments. The course does contain a practical element with Fieldwork Skills being integral for success.

**Assessment:**

Follows IBDP Geography Assessment

Skills and Applications tasks 30%

Fieldwork Report 20%

Examinations 50%

## Stage 1 History

(20 Credits)

**Pre-requisite:** Satisfactory completion of Year 10 History

**Course Description:** This course is an approved SACE Stage 1 Course that follows the IBDP Modern History SL curriculum. Students will critically engage with a range of historical sources related to the prescribed subject: The Move to Global War (Italy, Germany and Japan). Two major thematic studies focus on the; Authoritarian States (Adolf Hitler, Mao Zedong and Benito Mussolini); and The Cold War: superpower tensions and rivalries.

**Assessment:**

Follows IBDP History Assessment

Skills and Applications tasks 50%

Examination 50%

## Stage 1 Legal Studies

(20 Credits)

**Pre-requisite:** Satisfactory completion of Year 10 History and Year 10 English

**Course Description:** Stage 1 Legal Studies explores how the Australian Legal System distributes and balances power. Students study the interactions of law-making institutions within Australia's constitutional monarchy. This is addressed in five topics: Law and Communities, Government, Law-making, Justice and Society, and Aborigines and Torres Strait Islanders.

This legal framework is explored through case studies that ultimately explore the tensions surrounding how rights are determined as between the individual and the state. Such case studies incorporate mock parliaments, mock trials, mooting and a visiting the courts.

**Assessment:**

Report (10%)

Semester exam (15%)  
End of year exam (25%)  
Collaborative Mock Trial Presentation (20%)  
Inquiry (30%)

## Stage 1 Religion Studies

(20 Credits)

**Pre-requisite:** Satisfactory completion of Year 10 History

The Stage 1 Religion Studies course focuses on the ethics, morality and origins of religion. The course will investigate the origins of theocratic societies, the ethics and morality of religious intent and the purpose of religious practices. The students will consider the historical role of religion and its role in the power struggle between societies and democracy. Students will investigate the role of religion throughout human development rather than proselytise a particular belief system.

**Assessment:**

Assessment Type 1 Practical Activity/Presentation 20%  
Assessment Type 2 Issues Investigation 40%  
Assessment Type 3 Reflection 20%  
Examination (Issues Investigation) 20%

## Stage 1 Chinese Background Speakers

(20 Credits)

**Assumed Knowledge:** Year 10 Chinese A

**Course Description:** The course consists of four prescribed themes and a number of prescribed contemporary issues. The themes have been selected to enable students to extend their understanding of the interdependence of language, culture, and identity. The four themes are: China and the World; Modernisation and Social Change; The Overseas Chinese-speaking Communities; Language in use in Contemporary China.

Students use reading, writing, viewing, listening, speaking, and information and communication technologies to create and engage effectively with a range of texts in Chinese. They locate, record, analyse, synthesise, and use knowledge relevant to a range of contexts.

Students engage with, and reflect on, the ways in which texts are created for specific purposes and audiences. Individually and in groups they reflect critically on, and use, appropriate language to convey meaning and solve problems in both familiar and unfamiliar contexts. They use a range of language techniques to convey complex thoughts and ideas to express personal and group perspectives on issues.

**Assessment:**

Assessment Type 1 Interaction 20%  
Assessment Type 2 Text Production 30%  
Assessment Type 3 Text Analysis 20%  
Assessment Type 4 Investigation 30%

## Stage 1 Essential Mathematics

(20 Credits)

**NOTE:** Students must achieve a C Grade or better in at least 10 Credits of Stage 1 Mathematics to meet the SACE numeracy requirements.

**Assumed Knowledge:** Completion of Mathematics at Year 10

**Course Description:** This course is designed to prepare students for applying mathematical knowledge to working and real-world situations. Topics include: Calculations, Time & Ratio, Data in Context, Measurement, Geometry, Earning & Spending and Investing.

**Assessment:**

Skills and Application tasks 75%

Investigations 25%

## Stage 1 General Mathematics

(20 Credits)

**NOTE:** Students must achieve a C Grade or better in at least 10 Credits of Stage 1 Mathematics to meet the SACE numeracy requirements. This is a pre-requisite subject for Stage 2 General Mathematics or Stage 2 Essential Mathematics.

**Assumed Knowledge:** Year 10 Mathematics B Grade or above.

**Course Description:** This course is designed to prepare students for General Mathematics at SACE Stage 2. The course builds knowledge, understanding and skills in the following disciplines: Statistical Investigation, Measurement, Trigonometry, Investing & Borrowing, Linear & Exponential Functions and Matrices & Networks.

**Assessment:**

Skills and Application tasks 75%

Investigations 25%

## Stage 1 Mathematical Methods

(20 Credits)

**NOTE:** Students must achieve a C Grade or better in at least 10 Credits of Stage 1 Mathematics to meet the SACE numeracy requirements. This is a pre-requisite subject for Stage 2 Mathematical Methods and a component of the pre-requisite learning for Stage 2 Specialist Mathematics.

**Assumed Knowledge:** Year 10 and 10 Advanced Mathematics B Grade or above

**Course Description:** This course is designed to prepare students for Mathematical Methods at SACE Stage 2. Additionally, it is prerequisite for students intending to study Specialist Mathematics. There is a progression of content, applications, level of sophistication, and abstraction leading to Stage 2. The course builds knowledge, understanding and skills in the following disciplines: Functions and Graphs, Quadratic Theory, Statistics, Circular functions, Further Polynomials and an Introduction to Differential Calculus.

**Assessment:**

Skills and Application tasks 75%

Investigations 25%

## Stage 1 Specialist Mathematics

(20 Credits)

**NOTE:** Students must achieve a C Grade or better in at least 10 Credits of Stage 1 Mathematics to meet the SACE numeracy requirements. This is a pre-requisite subject for Stage 2 Specialist Mathematics and must be studied with Stage 1 Mathematical Methods.

**Assumed Knowledge:** Year 10 and 10 Advanced Mathematics B Grade or above

**Course Description:** This course is ideal preparation for students planning to study Stage 2 Mathematical Methods and a pre-requisite for Specialist Mathematics at Stage 2. There is a progression of content,



applications, level of sophistication, and abstraction leading to Stage 2. The course builds knowledge, understanding and skills in the following disciplines: Arithmetic and Geometric Sequences & Series, Vectors in the Plane, Geometry, Matrices; Real & Complex Numbers; Further Trigonometry.

**Assessment:**

Skills and Application tasks 75%

Investigations 25%

## Stage 1 Drama

**(20 Credits)**

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**All Year 11 Drama students will study the SACE Stage 1 Drama course, which acts as a foundation for either SACE Stage 2 Drama or IBDP Theatre in Year 12.**

**Assumed Knowledge:** There are no formal prerequisites to Stage 1 Drama, however, prior study of Drama in Years 7-10 will be advantageous.

**Course Description:** Stage 1 Drama students engage in learning as authentic dramatic artists and work collaboratively to form a shared vision to achieve individual and shared outcomes. Students explore and respond to ideas, processes and viewpoints from a range of drama which may include texts, innovators, styles and professional productions. Students develop their understanding of drama, their thinking as artists and their skills as practitioners in dramatic roles.

**Assessment:**

Assessment Type 1: Responding to Drama

Students will demonstrate their understanding, analysis and evaluation of professionally created drama productions and/or experiences in an oral, multimodal or written response. Students choose to respond to one or more works or dramatic experiences in their response. They analyse and evaluate the contribution of practitioners to the artistic and cultural value of the work and draw links with the development of their own practice as authentic dramatic artists.

Assessment Type 2: Performance

In Performance, students work collaboratively through the framework of the Company and Performance area of study to conceive, explore, develop, produce, refine and perform a dramatic work or product. They apply the dramatic process by undertaking roles and collaborating in an ensemble to achieve individual and shared outcomes. Students present their performance and teachers ensure that each acting student has the opportunity for a minimum of 5 minutes in-focus on stage or the equivalent for off-stage presenters.

Each student presents evidence of their learning including their understanding, creativity, analysis, evaluation and skills development in the form of an individual or group presentation, or an individual or group multimodal presentation or an individual written document with accompanying visual evidence.

The aim of the presentation of evidence is to demonstrate each student's analysis and evaluation of their learning and skills development throughout the process and performance.

Assessment Type 3: Creative Synthesis

In Creative Synthesis, students apply the dramatic process to a published dramatic text or self-devised piece to create a concept for a hypothetical or actual dramatic product. In the creation of their product students also apply technology imaginatively and innovatively and take creative risks.

Students adopt a dramatic role including (Designer, Director, Filmmaker, Playwright/screenwriter and Actor) and discuss their artistic intentions, including their ideas and rationale for the use of innovative technology in the hypothetical staging of their product.

## Stage 1 Music Advanced

(20 Credits)

**All Year 11 Music students will study the SACE Stage 1 Music Advanced course, which acts as a foundation for SACE Music Studies, Music Explorations, Music Performance: Solo/Ensemble and IBDP Music in Year 12.**

**Assumed Knowledge:** Completion of Year 10 Music course or equivalent knowledge/skills from other music studies at the discretion of the Director of Music. Students must be undertaking tuition on an instrument/voice.

**Course Aim:** Stage 1 Music is designed to extend students' existing musical understanding and skills in creating and responding to music. It provides a pathway to Stage 2 Music Studies, Music Explorations, Music Performance - Ensemble, Music Performance - Solo.

**Course Description:** This course consists of three strands; understanding music, creating music, responding to music. Students extend their understanding of music theory and aural concepts, including the study of harmony, and use this knowledge and skills to inform their own arrangements and compositions. Students explore, analyse and discuss works from diverse social and cultural contexts. Students explore and develop their practical music-making skills through performing (solo and/or ensemble/ digital sounds), and arranging or composing works using standard notation software Sibelius and/or the digital audio workstation (DAW) Logic Pro. Students respond to the creative works of themselves and others through written reviews, commentaries and discussions.

### **Assessment:**

Assessment Type 1: Creative Works (50%)

- 1 - One performance: solo or ensemble – 2 to 5 mins
- 2 - One composition/arrangement 1: Notation or digital – 1 to 3 mins
- 3 - Choice of 1 or 2
- 4 - Choice of 1 or 2

Assessment Type 2: Musical Literacy (50%)

- 1 - Music theory/aural and analysis assessment
- 2 - Performance reflection (650 word analysis/review)
- 3 - Creation journal (650 words)
- 4 - Music theory/aural and analysis assessment

## Stage 1 Outdoor Education

(20 Credits)

**Assumed Knowledge:** No requirements

**Course Description:** Students gain an understanding of ecology, environmental sustainability, cultural perspectives, and physical and emotional health through participating in outdoor activities. They learn to develop and apply risk and safety management skills and responsibility for themselves and other members of a group. Students reflect on personal development and environmental practices related to outdoor activities.

This course includes five topics all of which are crucial elements of the program.

- Topic 1: Natural systems and Human Impacts. Students will look at the impacts of humans on ecosystems and necessary strategies for the conservation and management of issues. Observations from your expeditions will be used to help demonstrate and evaluate these practices.
- Topic 2: Planning and management. In this topic students develop basic skills in planning and implementing outdoor activities and lightweight journeys. Students will have the opportunity to complete their first aid qualification and assess and manage risk.

- Topic 3: Uses of Natural Environments. Students will use a range of resources to learn about the development and uses of natural environments. They will look at different perspectives on the uses of natural environments within Australia.
- Topic 4: Conservation and Sustainable practises. Students explore and analyse human interactions with natural environments to build understanding of the balance between the human uses, potential risks, conservation and sustainability of the environments.
- Topic 5: Outdoor journeys. Students plan and undertake outdoor activities (2) and journeys (2) in a group. Students use peer assessment and self-assessment to gather information about the development of their teamwork and practical outdoor skills. In this topic students develop the basic skills they need to participate safely and effectively in both outdoor activities and outdoor journeys. Specific activities might include kayaking, orienteering, rock climbing, bushwalking, mountain biking, snorkelling, scuba diving and surfing.

#### **Assessment:**

AT1 (40%) - About Natural Environments: This will be an assessment of a student's evidence of learning with regard to understanding of environmental systems and issues of potential human impacts on natural environments. Evidence of learning will be collected from three assessment pieces.

AT2 (60%) - Experiences in Natural Environments: This will be a record of a student's planning, reflections, analysis and evaluation of their experiences in natural environments. Two assessments are based on their application and development of skills and one assessment on planning safe and sustainable journeys.

**Requirements for Success:** An appreciation of outdoor pursuits and a respect for the environment are essential to skilful participation in Outdoor Education. Students should have a preparedness to participate in 2 x 3-day outdoor journeys. Completion of the Year 10 Outdoor Education subject would be a benefit to successful completion but not essential.

## **Stage 1 Physical Education**

**(20 Credits)**

**Assumed Knowledge:** Successful completion of Year 10 Sport Science is highly beneficial

**Course Aim:** The SACE Stage 1 Physical Education course aims to build upon knowledge and skills developed in Year 10 and prepare students for further study in the SACE Stage 2 Physical Education course. The course provides the opportunity to merge practical activities with theoretical topics and tasks.

**Course Description:** Over the year the students will undertake an integrated approach that promotes deep learning in three Focus Areas, 'In, Through and About' Physical Education. The biophysical domain includes learning and applying Exercise Physiology and Biomechanical concepts. The psychological domain develops an understanding of Skill Acquisition and Learning theory concepts. The socio- cultural domain develops knowledge and understanding of, and skills to take responsible action related to, barriers, enablers, equity and inclusivity in physical activity. Physical activities will include sports, theme-based games, fitness and recreational activities, such as golf, badminton, touch and handball.

**Assessment:** Students will provide evidence of their learning through four assessment tasks across the year. This will include three 'Improvement Analysis' tasks each up to a maximum of 1,000 words each (or a maximum of 6 minutes for each individual oral or multimodal presentation) and one 'Physical Activity Investigations' task each up to a maximum of 1,000 words (or a maximum of 6 minutes for each oral or multi modal presentation). Each school assessment task carries a 25% weighting.

## Stage 1 Biology

(20 Credits)

**Assumed Knowledge:** Satisfactory completion of Year 10 Science

**Course Description:** Biology encompasses the study of living things and the interactions integral to the survival of species and conservation of ecosystems. In this subject, students will study 4 topics:

Topic 1: Cells and Microorganisms

Topic 2: Infectious Disease

Topic 3: Multicellular Organisms

Topic 4: Biodiversity and Ecosystem Dynamics

The cell is the basic unit of life. In this topic, students examine the development of the cell theory, the exchange of materials, and processes required for cell survival. Students use the microscope and digital modelling to study the structure and function of cells, and investigate ways in which matter is recycled and energy is transformed and transferred in the biochemical processes of photosynthesis and respiration.

Students learn about the conditions necessary for the growth and survival of microorganisms, their role in decomposition and food spoilage, and innovative uses of them. Students examine the various agents that can cause infectious diseases and the main components of the immune system to combat them.

Students will also study the structure and function of various multicellular organisms, in human, other animal, and/or plant systems. They consider the structure and function of the main organ systems of the body.

Students will investigate diverse ecosystems, exploring the range of biotic and abiotic components to understand the dynamics, diversity, and underlying unity of these systems. The role of plants in ecosystems will be studied. Students use classification keys to identify organisms, describe the biodiversity in ecosystems, and investigate patterns and change in relationships between species.

Students will be encouraged to be critical thinkers and explore how scientific progress and discoveries are influenced and shaped by a wide range of social, economic, ethical, and cultural factors. Practical activities will take a range of forms and see students develop investigable questions and/or testable hypotheses, and select and use equipment appropriately to collect data. Students display and analyse the data they have collected, evaluate procedures, describe their limitations, consider explanations for their observations, and present and justify conclusions appropriate to the initial question or hypothesis.

**Assessment:** There are numerous assessment tasks at various stages of the year including topic tests (50%), practical reports and Science as a Human Endeavour (SHE) investigations (50%). These tasks are marked according to the SACE criteria.

## Stage 1 Chemistry

(20 Credits)

**Assumed Knowledge:** Satisfactory completion of Year 10 Science

**Course Description:** Chemistry is the study of matter and the chemical reactions between substances. Science inquiry skills and science as a human endeavour are integral to students' learning in this subject and are interwoven through the science understanding.

In their study of these topics, students develop and extend their understanding of some of the fundamental principles and concepts of chemistry, including structure, bonding and acid-base reactions.

Using an inquiry approach to learning through observation, speculation, prediction, experimentation, analysis, evaluation, and communication students develop and extend their science inquiry skills and reinforce their understanding of science as a human endeavour.

The year comprises six topics:

- Topic 1: Materials and Their Atoms - The periodic table, electron configuration and the mole concept
- Topic 2: Combining Atoms - Ionic, covalent and metallic bonding and physical properties of substances
- Topic 3: Molecules - Covalent shapes and intermolecular forces, organic chemistry and polymers
- Topic 4: Mixtures and Solutions - Miscibility, solubility, concentration, stoichiometry and enthalpy changes
- Topic 5: Acid and Bases - Bronsted-Lowry theory, reactions of acids and bases, pH scale
- Topic 6: Redox Reactions - Metal reactivity, oxidation and reduction, electrochemistry

**Assessment:** There are numerous assessment tasks at various stages of the year including topic tests (50%), practical reports and Science as a Human Endeavour (SHE) investigations (50%). These tasks are marked according to the SACE criteria.

## Stage 1 Physics

(20 Credits)

**Assumed knowledge:** Satisfactory completion of Year 10 Science

**Course Description:** The study of Physics is constructed around using qualitative and quantitative models, laws, and theories to better understand matter, forces, energy, and the interaction among them.

Students have opportunities to develop their investigative skills and use analytical thinking to explain and predict physical phenomena. Students plan and conduct investigations to answer a range of questions, collect and analyse data and observations, and communicate their findings in an appropriate format. Problem-solving and using evidence to make and justify conclusions are transferable skills that are developed in this course.

The following topics are studied:

- Topic 1: Motion and Forces
- Topic 2: Energy and Momentum
- Topic 3: Thermal Physics
- Topic 4: Waves
- Topic 5: Electricity
- Topic 6: Nuclear Models and Radioactivity

By studying physics, students understand how new evidence can lead to the refinement of existing models and theories and to the development of different, more complex ideas, technologies, and innovations.

Through further developing skills in gathering, analysing, and interpreting primary and secondary data to investigate a range of phenomena and technologies, students increase their understanding of physics concepts and the impact that physics has on many aspects of contemporary life.

By exploring Science as a Human Endeavour (SHE), students develop and apply their understanding of the complex ways in which science interacts with society, and investigate the dynamic nature of physics. They explore how physicists develop new understanding and insights, and produce innovative solutions to everyday and complex problems and challenges in local, national, and global contexts.

In Physics, students integrate and apply a range of understanding, inquiry, and scientific thinking skills that encourage and inspire them to contribute their own solutions to current and future problems and challenges. Students also pursue scientific pathways, for example, in engineering, renewable energy generation, communications, materials innovation, transport and vehicle safety, medical science, scientific research, and the exploration of the universe.

**Assessment:** There are numerous assessment tasks at various stages of the year including topic tests (50%), practical reports and Science as a Human Endeavour (SHE) investigations (50%). These tasks are marked according to the SACE criteria.

## Stage 1 Design & Technology: Digital Communication Solutions - Computer Aided Design (CAD) (20 Credits)

**Assumed Knowledge:** Year 10 Design & Technology (CAD/CAM) - but not essential

### CAD

**Course Description:** This is a practical based subject focusing on product design using CAD modelling software. Students will use a range of Computer Aided Design processes such as part modelling, assembling, technical drawing and rendering to design and make products with Autodesk Inventor 3D CAD software, in the context of communication products.

All students will complete two compulsory skills and application tasks that will comprise one Materials Application task and a two Specialised Skills tasks.

Students will complete a Design Folio to research and develop their individual major and minor products. The Design Folio includes Investigation, Planning, Production Record, Issues task and Evaluation tasks. Students produce and present their Major and Minor product designs using a range of specialised 2D and 3D software applications.

Students will produce a **Resource Study** comprising of:

Resource Investigation: Students will investigate and analyse the functional characteristics and properties of two or more materials of their choice. Students will create a series of tests to generate data on the functional characteristics of the materials.

Issues Exploration: Students will also investigate the sustainability of the materials they test and explore ethical issues related to their designed solution.

**Assessment:** Assessment at Stage 1 requires students to demonstrate evidence of their learning through the following assessment types:

### School-based Assessment (70%)

Skills and Applications Tasks 20%

Product and Folio 50%

### External Assessment (30%)

Folio 30%. Resource Investigation is sent to SACE for final moderation.

## Stage 1 Design & Technology: Material Solutions – Metal (20 Credits)

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**Assumed Knowledge:** Year 10 Design & Technology (Metalwork/Woodwork) - but not essential.

**Course Description:** This is a practical based subject in which students will use a range of manufacturing technologies such as tools, machines and equipment to design and make products with the resistant material, in the context of material products.

Students will complete two compulsory **Skills Tasks** where they will:

Document skill development in practice welding activities through photographic evidence with recorded oral discussion or written comments. Student evaluate their learning in undertaking the task through one or more capabilities and state its relevance in the design and realisation process.

Students will also undertake a **Design Process and Product** where they will:

Investigate and create a design brief. Investigate and analyse products that clearly connect to their design brief. Throughout the investigation students will explore product features such as function, aesthetics and constraints in direct relation to their brief.

Design, develop and plan concepts that they have analysed from their investigation. Create a variety of solutions for the brief using drawings and sketches. Validate a designed solution that best meets the brief and develop a series of drawings to support their production process. Student will develop a materials and costing list for the product, as well as a procedure and schedule for the safe and timely manufacture of their product. Produce a product by applying skills, processes, procedures and techniques to create the product that best meets their design brief.

Evaluate the design process and product they have created in response to their design brief as well as their product realisation.

Students will produce a **Resource Study** comprising of:

Resource Investigation: Students will investigate and analyse the functional characteristics and properties of two or more materials of their choice. Students will create a series of tests to generate data on the functional characteristics of the materials.

Issues Exploration: Students will also investigate the sustainability of the materials they test and explore ethical issues related to their designed solution.

## Stage 1 Design & Technology: Material Solutions –

### Wood

(20 Credits)

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#### Woodwork

All students will complete two compulsory skills and application tasks that will comprise;

One processes and techniques assessment: Students will learn and demonstrate different wood working skills and techniques; e.g. Dressing timber, machine safety and jointing, hand power tool safety and use, finishing, and manufacturing.

One materials application assessment: Students will investigate and analyse the functional characteristics and properties of two or more materials or components they are considering for use in the creation of their Major product. They report on how their research into and testing of the characteristics and properties of these materials or components will affect their selection for use in the realisation of their product.

Students will use a design brief to research and develop their individual major practical task before producing the product and record the design process in their folio.

**Assessment:** The following assessment types enable students to demonstrate their learning in Stage 1 Design and Technology.

Assessment Type 1: Skills and Application Tasks (2 tasks are required). Processes and Techniques will require one task. Materials Application will require one task.

Assessment Type 2: Folio

Assessment Type 3: Product

Assessment tasks within each assessment type will be marked against the following technology criteria: Investigating; Planning; Producing; Evaluating.

## Stage 1 Design & Technology: Robotic and Electronic Systems – Coding & Automation (20 Credits)

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**Assumed Knowledge:** Given the highly technical nature of this subject, students need to have completed Year 10 Systems and Control Products.

### **Coding & Automation**

**Course Aim:** Students will use coding to gain an understanding of controlling systems in real world contexts. Project based practical work will challenge students to generate complex and well-resolved prototypes to solve engineering challenges.

**Course Description:** This is a practical, project-based subject focusing on automated control through the coding of an Arduino (micro controller). It will focus on systems, and how they can be used to solve problems through the AC Design Cycle. Students will gain an understanding of control principles as well as how to design and engineer custom parts to provide novel solutions to problems.

Students will be required identify a real-world problem and then devise a prototype which uses automated systems to solve the problem.

This course will give students an appreciation of real-world engineering design challenges as they will need to use their creativity and problem-solving skills to manage finite resources, working within constraints to deliver their product solution. The focus on physical automated control systems will also require students to work within tight technical specifications in the creation of project components.

This course is related to the fields of ICT, mechanical engineering, electrical engineering, manufacture, industrial design and digital media production.

**Assessment:** The following assessment types enable students to demonstrate their learning in Stage 1 Design and Technology.

Assessment Type 1: Skills and Application Tasks (2 tasks are required). Processes and Techniques will require one task. Materials Application will require one task.

Assessment Type 2: Folio

Assessment Type 3: Product

Assessment tasks within each assessment type will be marked against the following technology criteria: Investigating; Planning; Producing; Evaluating.



## Stage 1 Visual Arts: Art

(20 Credits)

**Assumed Knowledge:** No prerequisites or assumed knowledge; however, previous experience in Art, Design, CAD or Design Technology in Year 9 or 10 is desirable. Students must have an interest in Visual Art and in developing their practical skills.

**Course Description:** In Year 11 Visual Arts students continue to develop their practical skills and understanding by studying a selection of art movements, artists, media and themes. They continue to work towards developing an effective self-instigated and independent way of working in preparation for Year 12.

Students develop the skills to conceive, develop and make artworks that reflect the development of their own ideas and individual artistic style. They demonstrate visual thinking through the documentation and evaluation of their ideas and skills. The application of technical skill across a range of diverse art media is a primary focus of the course. Students analyse, interpret and respond to visual arts in different contexts and communicate their understanding of their own and other artists' works.

**Course Content:** Students complete 3 major units of work:

### Visual Studies - 30%

Students complete two Visual Studies based on an aspect experimental and/or experiential focus of work.

### Folio – 40%

Students complete practical folios supported by developmental and preparatory work. The nature of the folio can be 2-dimensional, 3-dimensional or a combination of both.

The folio includes the ideation, research and development of student visual ideas on a set class theme, culminating in the planning for a final practical artwork

### Practical – 30%

Students complete at least two practical works linked to each of their folios. The practical work is resolved from visual thinking and learning documented in the folio and includes artworks and a practitioner's statement.

## Stage 1 Visual Arts: Design

(20 Credits)

**Assumed Knowledge:** No prerequisites or assumed knowledge but previous experience with Art or Design or CAD in Year 9 or 10 is desirable. There is an emphasis on introducing skills, knowledge and concepts which caters for students who have had varied previous experiences with Art or Design and are now wishing to specialise in Design. This course also caters to those whom have had limited exposure to the subject area.

**Course Description:** Architecture sections of the course focus upon exploring the creative thinking processes and the media used to solve spatial problems in society. Students are exposed to exploring architectural design applications such as residential and commercial architecture, interior architecture and landscape design. Students with interests in creative expression, 3-D graphics and engineering will enjoy the focus of this course. Theories of design practice are explored as is the integral relationship between form and function within the built environment. Design media are explored and technical skills refined through using the Adobe suite of design software including Photoshop and Illustrator and the architectural software Trimble Sketch-up. Drawing, photography and model making are also explored in more depth. The architecture course rewards individuality through creative and critical thinking and caters for students who wish to explore their design thinking and learning through digital mediums.

Graphic design sections of the course focus upon exploring the creative thinking processes and the media used to visually communicate in society. Students are exposed to exploring visual design applications such as logo design, package and poster design, website design and illustration. Students with interests in creative expression

and computer-based art will enjoy the focus of this course. Theories of design practice are explored as is the integral relationship between typography and graphic communication. Design media are explored and technical skills refined through using the Adobe suite of design software including Photoshop and Illustrator. Drawing, photography and packaging mock ups are also explored in more depth. The graphic design course rewards individuality through creative and critical thinking and caters for students who wish to explore their design thinking and learning through digital mediums.

**Assessment:**

Folio: Documents the creative design process within graphic design and architecture 40%

Practical: Showcases skills in the final resolution of design ideas using Design media 30%

Visual Study: Analysis and synthesis of design skills and knowledge within graphic design and architecture 30%

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## Stage 1 Personal Learning Plan (PLP) (10 Credits)

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**Duration:** Two terms, studied in Year 10.

**SACE completion will not be recorded without a passing grade in the Personal Learning Plan (PLP).** Notwithstanding, the PLP allows considerable flexibility and this sees highly differentiated content in schools around the State.

**SACE completion will not be recorded without a passing grade in the Personal Learning Plan (PLP).** Notwithstanding, the PLP allows considerable flexibility and this sees highly differentiated content in schools around the State.

**Course Description:** The Personal Learning Plan (PLP) is a compulsory 10-credit subject undertaken at Stage 1. All students in Year 10 at the College complete PLP.

Students must achieve a C grade or better to complete the subject successfully and gain their SACE.

The PLP helps students to:

- plan their personal and learning goals for the future
- make informed decisions about their personal development, education, and training.

Developing goals for the future will engage students in activities such as:

- selecting subjects, courses, and other learning relevant to pathways through and beyond school (including IB)
- investigating possible career choices
- exploring personal and learning goals.

**Assessment:**

**School-based Assessment (70%)**

A series of written, goal-based and interactive tasks.

**Review of learning (30%)**

A final evaluative presentation of their experiences pertaining to;

- effectiveness of strategies and
- development in their capacity as a learner (the 7 Australian Curriculum General Capabilities).

## Vocational Education and Training (VET)

(10-150 credits)

**Duration:** Short courses (several weeks) through to full year and 2-year courses. Courses are most often delivered one day per week, but may also be for just a portion of the day or after school.

**Assumed knowledge:** There is no assumed knowledge for most courses; however, an interest in the subject area is expected and a desire to investigate vocational interests through VET is recommended.

**Course description:** VET courses are available across a broad range of subject/occupational areas and can be categorised by the following groups:

- Art, Design, Fashion & Multimedia
- Building, Furnishing & Furniture Design
- Business Management, Finance, Police & Property Services
- Community Services, Health & Education
- Computing & Information Technology
- Engineering, Electro technology & Mining
- Hospitality, Tourism, Events & Languages
- Primary & allied industries
- Sports & recreation
- Transport & engineering

**Assessment:** Competency based assessment, often practical in nature. Competencies can be achieved even where a full certificate may not be completed. All competencies are nationally recognised by both industry and other learning institutions.

Courses range from a Certificate I or II (most common) through to Certificate III, IV or Diploma level. Apprenticeships generally sit at a Certificate III level. Not all industry areas are suitable for completion of a Certificate III whilst at school.

The SACE Board decides whether competencies are Stage 1 or 2 and publish this in the VET Recognition Register. Credits are accumulated at a rate of 10 credits for every 70 nominal hours and then 5 credits per 35 nominal hours, where applicable, thereafter.

One completed, eligible Certificate III course can contribute toward an ATAR. A score is calculated from the average of the first 70 Stage 2 subject credits that contribute to the aggregate.

**Additional details:** Students in Years 10, 11 and 12 are eligible to undertake a VET course with the support of the VET coordinator, the Year Level Coordinator and the Assistant Director of Teaching & Learning.

Costs may be incurred where courses are taken as an additional subject rather than as a replacement for a regular academic subject.

# SACE Stage 2 Subjects

## Stage 2 English

(20 Credits)

**Assumed Knowledge:** Students should be equipped with the skills to successfully write for a variety of purposes, contexts and target audiences. They need to be proficient in both the analysis and production of texts.

**Course Description:** Students read and view a range of texts, including texts created by Australian authors. In comparing texts students analyse the relationships between language and stylistic features, text types, and contexts. Recognising and analysing the language and stylistic features and conventions of text types in literary and everyday texts influences interpretation. Through close study of texts, students explore relationships between content and perspectives and the text and its context.

In the study of English, students extend their experience of language and explore their ideas through creating their own texts, and reading and viewing the texts of others. Students consider the powerful role that language plays in communication between individuals, groups, organisations, and societies. There is a focus on ways in which language defines, shapes, and reflects relationships between people.

Students appreciate how clear and effective writing and speaking displays a depth of understanding, engagement, and imagination for a range of purposes, audiences, and contexts.

**Assessment:** Students should provide evidence of their learning through eight assessments, including the external assessment component, by completing: three responses to texts; four created texts (one of which is a writer's statement); one comparative analysis.

### School-based Assessment Folio (70%)

Responding to Texts 30%

Creating Texts 40%

### External Assessment (30%)

Comparative Analysis

## Stage 2 English Literary Studies

(20 Credits)

**Assumed Knowledge:** This course should only be studied at Stage 2 if completed at Stage 1.

**Course Description:** Students read a range of extended texts and a number of shorter texts to focus on the skills and strategies of critical thinking, developing their own ideas; incorporate evidence to support these. They learn to construct logical and convincing arguments and compose responses that show the depth and clarity of their understanding, by focusing on the creativity and craft of the authors. The shared studies comprise three texts – one extended prose, one film and one drama text – and a range of poems that focus on the works of at least three poets. A comparative study of two texts includes one independently chosen by the student.

**Assessment:** Students produce up to five responses to their text studies; together, the responses comprise a maximum of 5,000 words. One of these responses can be oral or multimodal in form, where six minutes is equivalent to 1,000 words. There is flexibility within this study for the texts to be considered in terms of each other, leading to a single response or set of responses of up to 5000 words.

Students create two different types of text: One transformative text linked to another text, with a writer's statement (1,500 words, or nine minutes, or equivalent in multimodal form); one written, oral, or multimodal text (1000 words, or six minutes, or equivalent in multimodal form).

**School-based Assessment Folio (70%)**

Responding to Texts 50%

Creating Texts 20%

**External Assessment (30%)**

Comparative Text Study (critical essay; maximum of 1500 words) 15%

Critical Reading (90-minute examination developed by the SACE Board) 15%

## Stage 2 Essential English

**(20 Credits)**

**Enrolment is subject to course counselling**

**Learning Requirements:** In this subject, students are expected to:

- extend communication skills through reading, viewing, writing, listening, and speaking
- consider and respond to information, ideas, and perspectives in texts selected from social, cultural, community, workplace, and/or imaginative contexts
- examine the effect of language choices, conventions, and stylistic features in a range of texts for different audiences
- analyse the role of language in supporting effective interaction
- create oral, written, and multimodal texts that communicate information, ideas, and perspectives for a range of purposes

**Course Description:** In this subject students respond to and create texts in and for a range of personal, social, cultural, community, and/or workplace contexts. Students understand and interpret information, ideas, and perspectives in texts and consider ways in which language choices are used to create meaning.

**Assessment:****School-based Assessment (70%)**

Responding to Texts 30%

Creating Texts 40%

**External Assessment (30%)**

Language Study

## Stage 2 Accounting

**(20 Credits)**

**Assumed knowledge:** Satisfactory completion of Stage 1 Accounting

**Course Description:** The Accounting course develops students' knowledge of accounting concepts and conventions, management of firms' financial sustainability and provision of accounting advice.

These areas are developed through the study of Balance Day Adjustments, Cash Budgeting, Cash Flow Statements and Stock and Debtors Management. The Stage 2 course builds upon Stage 1 Accounting with a greater emphasis on interpretation of financial information and the use of this to craft accounting advice to business owners and managers.

**Assessment:****School-based Assessment (70%)**

Accounting Concepts and Solutions (40%)

Accounting Advice (30%)

### **External Assessment (30%)**

Examination

## **Stage 2 Economics**

**(20 Credits)**

**Assumed Knowledge:** Satisfactory completion of Stage 1 Economics

**Course Description:** Economics is the study of how society uses its scarce resources. Students build an awareness of how markets operate for individual goods and services (microeconomics), how different market structures (e.g. monopoly and oligopoly) affect the distribution of resources and the role that government may play. This is conducted through the lens of the demand-supply model.

Study of this course develops students understanding of how markets and the macroeconomy work, their ability to analyse and critically evaluate government economic policies, and their data analysis skills through analysis of economic data.

### **Assessments**

#### **School-based Assessment (70%)**

Folio 30%

Skills and Applications Tasks 40%

#### **External Assessment (30%)**

Examination

## **Stage 2 Geography**

**(20 Credits)**

**Pre-requisite:** Satisfactory completion of Year 11 Geography.

**Course Description:** The course consists of the following; a core topic and two option topics.

Examined Topic: Population and Change: This topic introduces students to the processes involved in population change. Through it, students become aware of the impacts of population and consumption on the environment.

Examined Topic: Ecosystems and People: This topic introduces students to the changing demand of resources and the impact on ecosystems. Through it, students become aware of the impacts on biodiversity and the impact on overall sustainability.

Non-examined topics are: Climate change, globalisation and transforming inequality.

### **Assessment:**

#### **School-based Assessment (70%)**

Individual Fieldwork Report 30%

Geographical Skills and Application 40%

#### **External Assessment (30%)**

Examination – Examined topic + mapping

## Stage 2 Legal Studies

(20 Credits)

**Pre-requisite:** Satisfactory completion of Stage 1 Legal Studies

**Course Description:** Stage 2 Legal Studies focuses on the Australian Legal System and the connections and influences of the system at a local and global level. Students will study 4 key topics; The Australian Legal System, Constitutional Government, Law Making and Justice Systems. These topics will be explored through the key concepts of parliamentary democracy, government and participation in a democracy. An understanding of factors that impact law-making, dispute resolution and the implications of social and economic forces on decision making will be developed. Through the course an analysis of the Australian Legal System, the changing legal systems, constitutional and justice systems will be explored from varied legal perspectives.

Stage 2 Legal Studies explores how the Australian Legal System distributes and balances power. Students study the interactions of law-making institutions within Australia's constitutional monarchy. This is addressed in three topics: Sources of Law, Dispute Resolution, and the Constitution. This legal framework is explored through case studies that ultimately explore the tensions surrounding how rights are determined as between the individual and the state.

### **Assessment:**

#### **School-based Assessment (70%)**

Folio (40%)

Inquiry (30%)

#### **External Assessment (30%)**

Examination – source analysis and essay question

## Stage 2 History

(20 Credits)

**Pre-requisite:** Satisfactory completion of Stage 1 History

**Course Description:** The Modern History course consists of two core units – Modern Nations – China (1949 – 1999) and The World Since 1945: The Changing World Order (1945 – 1991). In their study of one nation, students investigate the social, political, and economic changes that shaped the development of that nation. Students also investigate the political and economic interactions of nations and the impact of these interactions on national, regional, and/or international development.

The Modern Nations – China (1949 – 1999) study focuses on:

- Mao and the consolidation of the Revolution
- the search for harmony
- the road to modern China

The World Since 1945: The Changing World Order (1945 – 1991) study focuses on:

- the origins of the superpower rivalry
- the nature of the Cold War
- the end of the Cold War
- the consequences of the Cold War

Students also undertake an individual historical study based on an aspect of the world since c.1750. Students inquire into, explore, and research a historical idea, event, person, or group in depth. They interpret and synthesise evidence to support their argument and draw conclusions. The historical study should be a maximum of 2000 words if written, or the equivalent in oral or multimodal form.

**Assessment:****School-based Assessment (70%)**

Folio 50%

Essay 20%

**External Assessment (30%)**

Examination

## Stage 2 Business Innovation

**(20 Credits)****Pre-requisite:** Satisfactory completion of Stage 1 Business Innovation**Course Description:** In Business Innovation, students engage with real world problems to identify, design, test, and communicate viable business solutions.

Stage 2 Business Innovation is structured around three key contexts:

- Designing business
- Sustaining business
- Transforming business.

Through these contexts, students develop and apply their understanding of innovation, decision-making and project management, financial literacy and information management. Students gain an understanding of fundamental business concepts and ideas, including the nature and structure of business, sources of finance, forms of ownership and legal responsibilities and requirements.

**Assessment:****School-based Assessment (70%)**

Business Skills (40%)

Business Model (30%)

**External Assessment (30%)**

Business Plan &amp; Pitch (30%)

## Stage 2 Chinese Background Speakers

**(20 Credits)****Assumed knowledge:** Satisfactory completion of Stage 1 Chinese Background Speakers is compulsory**Course Description:** The course consists of four prescribed themes and a number of prescribed contemporary issues. The themes have been selected to enable students to extend their understanding of the interdependence of language, culture, and identity. The four themes are: China and the World; Modernisation and Social Change; The Overseas Chinese-speaking Communities; Language in use in Contemporary China.

Students use reading, writing, viewing, listening, speaking, and information and communication technologies to create and engage effectively with a range of texts in Chinese. They locate, record, analyse, synthesise, and use knowledge relevant to a range of contexts.

Students engage with, and reflect on, the ways in which texts are created for specific purposes and audiences. Individually and in groups they reflect critically on, and use, appropriate language to convey meaning and solve problems in both familiar and unfamiliar contexts. They use a range of language techniques to convey complex thoughts and ideas to express personal and group perspectives on issues.



**Assessment:****School-based Assessment (70%)**

Assessment Type 1: Folio (interaction, text production and text analysis) 50%

Assessment Type 2: In-depth Study 20%

**External Assessment (30%)**

Oral Examination

Written Examination

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**Stage 2 Essential Mathematics****(20 Credits)**

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**Assumed Knowledge:** Students should have successfully completed Stage 1 General or achieved a B grade or above in Stage 1 Essential Mathematics.

**Course Description:** This course is developed from the following topics: Scales, Plans and Models; Measurement; Business Applications; Statistics; Investment and Loans.

**Assessment:****School-based Assessment (70%)**

Skills and Application Tasks 30%

Investigations 40%

**External Assessment (30%)**

Examination

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**Stage 2 General Mathematics****(20 Credits)**

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**Assumed Knowledge:** Students should have achieved a B grade or above in Stage 1 General Mathematics

**Course Description:** In this course students study the following topics: Modelling with Linear Relationships; Modelling with Matrices; Statistical Models; Financial Models; Discrete Models.

**Assessment:****School-based Assessment (70%)**

Skills and Application Tasks 40%

Investigations 30%

**External Assessment (30%)**

Examination

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**Stage 2 Mathematical Methods****(20 Credits)**

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**Assumed Knowledge:** Students should have achieved at least a B Grade in Stage 1 Mathematical Methods

**Course Description:** In this course students study the following topics: Differential Calculus; Discrete Random Variables; Integral Calculus; Logarithmic Functions; Continuous Random Variables and the Normal Distribution; Sampling and Confidence Intervals.

**Assessment:****School-based Assessment (70%)**

Skills and Application Tasks 50%  
Investigation 20%

**External Assessment (30%)**

Examination

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## Stage 2 Specialist Mathematics (20 Credits)

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**NOTE:** This course must be studied in conjunction with Stage 2 Mathematical Methods. This course may only be studied at Stage 2 if Specialist Mathematics completed at Stage 1.

**Assumed Knowledge:** Students should have achieved at least a B grade in Stage 1 Pre- Specialist Mathematics

**Course Description:** In this course students study the following topics: Mathematical Induction; Complex Numbers; Function and sketching Graphs; Vectors in Three Dimensions; Integration Techniques and Applications; Rates of Change and Differential Equations.

**Assessment:**

**School-based Assessment (70%)**

Skills and Application Tasks 50%  
Investigation 20%

**External Assessment (30%)**

Examination

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## Stage 2 Drama (20 Credits)

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**Assumed Knowledge:** Students considering the study of Stage 2 Drama in Year 12 must have completed the SACE Stage 1 Drama course.

**Course Description:** Stage 2 Drama is a 20-credit subject based on the following two areas of dramatic study:

- Company and Production
- Exploration and Vision

In Stage 2 Drama, students develop their capacities as critical and creative thinkers, meaningful storytellers, and lifelong learners. They learn highly valuable and transferable life skills, including problem-identifying and problem-solving, collaboration skills, project-work skills, informed risk-taking, creativity and innovation skills, and applied entrepreneurial skills — including maximising viability and sustainability. Through focused practical and theoretical study, and by visualising and making real drama products, students collaborate to create valuable and viable outcomes for audiences, and analyse and evaluate artistic processes and products.

**Assessment:**

**School Assessment (70%)**

Assessment Type 1: Group Production (40%) - 15 minutes of recorded evidence or 1,250 words written.  
Assessment Type 2: Evaluation and Creativity (30%) – Two tasks. Max 12 minutes or 2,000 words.

**External Assessment (30%)**

Assessment Type 3: Creative Presentation (20%) – Presentation (10-25 mins pending class size), Learning Portfolio 9 minutes or 1,500 words.

## Stage 2 Music Studies

(20 Credits)

**Assumed Knowledge:** Completion of Stage 1 Music Advanced or equivalent knowledge/skills from other music studies at the discretion of the Director of Music.

**Course Description:** Stage 2 Music Studies is a 20-credit subject that consists of the following strands:

- Understanding Music
- Creating Music
- Responding to Music

The strands in Music Studies are interconnected and not intended to be taught independently. Students develop an understanding of selected musical works and styles, including how composers manipulate elements of music, and apply this understanding to creating their own music as performances or compositions. They develop and apply their musical literacy skills and express their musical ideas through responding to their own works, interpreting musical works, and/or manipulating musical elements. Students synthesise the findings of their study, and express their musical ideas through their creative works, responses, and reflections.

**Assessment:**

**School assessment (70%)**

Assessment Type 1: Creative Works 40% - Solo and/or ensembles performances, and/or compositions

Assessment Type 2: Musical Literacy 30% - Test-style format, and practical application of concepts (i.e. harmonising a melody from a work)

**External assessment (30%)**

Assessment Type 3: Examination

## Stage 2 Music Explorations

(20 Credits)

**Assumed Knowledge:** Completion of Stage 1 Music Advanced or equivalent knowledge/skills from other music studies at the discretion of the Director of Music.

**Course Description:** Students experiment with, explore, and manipulate musical elements to learn the art of constructing and deconstructing music. They develop and extend their musical literacy and skills through understanding the structural and stylistic features and conventions of music, expressing their musical ideas, and reflecting on and critiquing their learning in music.

- three musical literacy tasks
- one portfolio of explorations
- one creative connections task

Music Explorations emphasises learning through exploring and experimenting with music. Through exploration music through responding to their own and others' works. This subject is flexible in its design, allowing individual and collaborative exploration options in performing, composing, arranging and exploring music technology. Through practical application of their understanding of musical elements, students learn to analyse and deconstruct music, manipulate sound and create musical works that express their ideas and emotions.

**Topics:** Musical Literacy (Theory and Analysis); Explorations (Performance, Composition, or Music Technology); Creative Connections Explorations (Performance, live or digital Composition)

**Assessment:**

Students provide evidence of their learning through five assessments, including the external assessment component.

**School Assessment (70%)**

Assessment Type 1: Musical Literacy (30%) - Melody composition, lead sheet and composer's statement, Performance Critique, Comparative Analysis

Assessment Type 2: Explorations (40%) - A set of short Performances or a set of Compositions that explore music and commentary

**External Assessment (30%)**

Assessment Type 3: Creative Connections (30%) (External Assessment)

Externally examined Performance or Composition, with discussion

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## **Stage 2 Music Performance – Solo\* (10 Credits)**

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**Assumed Knowledge:** Completion of Stage 1 Music Advanced, or equivalent knowledge/skills from other music studies, is highly recommended. Must be undertaking tuition on an instrument/voice.

**Course Description:** Stage 2 Music Performance – Solo is a 10-credit subject that consists of the following strands:

- understanding music
- creating music (performance)
- responding to music.

The strands in Music Performance – Solo are interconnected and not intended to be taught independently. Students develop and extend their musical skills and techniques in creating their own solo performances. They interpret their chosen musical works, and apply to their performances an understanding of the style, structure, and conventions appropriate to their repertoire.

Students extend their musical literacy through discussing key musical elements of their chosen repertoire, and interpreting creative works. Students express their musical ideas through performing, critiquing, and evaluating their performances.

**Assessment:****School assessment (70%)**

Assessment Type 1: Performance 30% - 6-8 minutes

Assessment Type 2: Performance and Discussion 40% - 6-8 minute performance, 800 word/4 minute (if oral) discussion

**External assessment (30%)**

Assessment Type 3: Performance Portfolio - 6-8 minute performance, 500 word/3 minute (if oral) discussion

\*This course may be studied offline at the discretion of the Director of Music.

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## **Stage 2 Music Performance - Ensemble\* (10 Credits)**

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**Assumed Knowledge:** Completion of Stage 1 Music Advanced, or equivalent knowledge/skills from other music studies, is highly recommended. Must be undertaking tuition on an instrument/voice.

**Course Description:** Stage 2 Music Performance - Ensemble is a 10-credit subject that consists of the following strands:

- understanding music
- creating music (performance)
- responding to music

The strands in Music Performance - Ensemble are interconnected and not intended to be taught independently. Students develop and extend their musical skills and techniques in creating performances as part of an ensemble. They interpret musical works and apply to their performances an understanding of the style, structure, and conventions appropriate to the repertoire.

Students extend their musical literacy through discussing key musical elements of the repertoire and interpreting creative works. Students express their musical ideas through performing, critiquing, and evaluating their own performances.

**Assessment:**

**School assessment (70%)**

Assessment Type 1: Performance 30% - 6-8 minutes plus 2 minute part test

Assessment Type 2: Performance and Discussion 40% - 6-8 minute performance plus 2 min part test, 800 word/4 minute (if oral) discussion

**External assessment (30%)**

Assessment Type 3: Performance Portfolio - 6-8 minute performance plus 2 min part test, 500 word/3 minute (if oral) discussion

\*This course may be studied offline at the discretion of the Director of Music.

## Stage 2 Outdoor Education

**(20 Credits)**

**Assumed knowledge:** Nil

**Course Description:** Outdoor Education is the study of the human connection to natural environments through outdoor activities. Students develop their sense of self-reliance and build relationships with people and natural environments. Outdoor Education focuses on the development of awareness of environmental issues through observation and evaluation.

By participating in outdoor activities, students develop knowledge and skills and reflect on their personal, group, and social development. They gain an understanding of ecology, environmental sustainability, cultural perspectives (including Aboriginal Australians' perspectives about land), and physical, emotional, and spiritual health. Through outdoor journeys, students increase their effectiveness as members of a group and develop skills in leadership, self-management, group management, planning and evaluating, personal reflection, assessing and managing risks, managing safety, and minimizing environmental impacts for sustainable futures.

The study of Outdoor Education also gives students opportunities to achieve good health and develop personal skills. Students reflect critically on environmental practices and are introduced to employment options in the outdoor and environmental fields. This course includes 3 focus areas, all of which are crucial elements of the program: Conservation and sustainability, Human connections with nature and personal and social growth and development.

**Assessment:** Students will undertake 5 assessment pieces. The following assessment types enable students to demonstrate evidence of learning:

- . AT1 – About Natural Environments
  - o Human Impacts on natural ecosystems (Coastal)
  - o Sustainable practises within natural environments (Adelaide Hills)
- . AT2 – Experience in Natural Environments
  - o 1 x 3-day outdoor activity (Base camp – Options Surfing, Rock Climbing or Scuba Diving)
  - o 1 x 3-day outdoor journey (Expedition – Options Sea Kayaking or Bushwalking)
  - o 1 x 3-day self-reliant journey (Expedition – Options Kayaking, Bushwalking or Mountain biking)
- . AT3 – Connections with Natural Environments (External Investigation)

- Students undertake one task, based on their understanding of and experiences in natural environments. Students independently choose an area of interest to further explore the connections they have made. They use these skills and understanding to explore the personal connections they have made with nature to enhance their own personal growth and development, and/or strategies for environmental sustainability.

### **School-based Assessment (70%)**

Assessment Type 1: About Natural Environments 20%

Assessment Type 2: Experience in Natural Environments 50%

### **External Assessment (30%)**

Assessment Type 3: Connections with Natural Environments 30%

**Requirements for Success:** An appreciation of outdoor pursuits and a respect for the environment are essential to skilful participation in Outdoor Education. Students should have a preparedness to participate in multiple three day outdoor journeys. Completion of Stage 1 Outdoor Education subject would be a benefit to successful completion.

## **Stage 2 Physical Education**

**(20 Credits)**

**Assumed Knowledge:** Successful completion of Year 10 Sport Science and Stage 1 Physical Education is highly beneficial

**Course Description:** The SACE Stage 2 Physical Education course aims to build upon knowledge and skills developed in Year 10 and Year 11. The course provides the opportunity to merge practical activities into theoretical topics and tasks. Over the year the students will undertake an integrated approach that promotes deep learning in three Focus Areas, 'In Movement, Through Movement and About Movement'. The biophysical domain includes learning and applying Exercise Physiology and Biomechanical concepts. The psychological domain develops an understanding of Skill Acquisition and Learning theory concepts. The socio- cultural domain develops knowledge and understanding of, and skills to take responsible action related to, barriers, enablers, equity and inclusivity in physical activity. Physical activities will include sports, such as volleyball and basketball, fitness and recreational activities including coaching, to support the assessment tasks.

**Assessment:** Students will provide evidence of their learning through 'four' assessment tasks across the year.

This will include:

- Assessment Type 1 - two 'Diagnostics' tasks (combining for 30%) with both tasks combining for a maximum of 3000 words (or a maximum of 18 minutes for both individual oral or multimodal presentations)
- Assessment Type 2 - one 'Improvement Analysis' task (40%) which contains up to a maximum of 4000 words, (or a maximum of 24 minutes for the oral or multi modal presentation).
- Assessment Type 3 – one 'Group Dynamics' task (30%) which contain up to a maximum of 2,000 words (or a maximum of 12 minutes for the oral or multi modal presentation).

## **Stage 2 Research Project**

**(10 Credits)**

**Duration:** Full year, studied in Year 11

Two SACE variants exist for the Research Project (RP). These are known as RPB and RPA respectively. Note: It is a compulsory pass for SACE, not compulsorily counted for ATAR; only included if beneficial to each candidate's final ATAR score, taking account of achievement scores in other subjects.

RPB is the default offering at Prince Alfred College. RPA is only made available in limited circumstances.

**SACE completion will not be recorded without a passing grade in either variant of the Research Project.**

**Assumed Knowledge:** It is understood that students would have acquired some experience with self-directed research; and possess some understanding of the strengths of various research processes including but not limited to Survey, Interview, Action Research, and Literature Review.

**Course Description:** Students are expected to:

- generate ideas to plan and develop a research project that uses appropriate research processes, with due consideration for ethical research principles
- consider the relevance of a chosen capability (Australian Curriculum: General Capabilities) to their research
- analyse information and explore ideas to develop their research
- develop and apply specific knowledge and skills
- produce a research outcome
- evaluate their research.

**Assessment:**

**School-based Assessment (70%)**

Folio: A set of evidence that would include a Research Proposal, evidence of planning and research development, and Capability development. 30%

Research Outcome: Students produce a research outcome to identify or demonstrate their key findings, which they substantiate with evidence and examples from their research. 40%

**External Assessment (30%)**

Students either evaluate or review their research experience; processes used, their research conduct and the completeness of their resolution of their inquiry.

## Stage 2 Biology

**(20 Credits)**

**Assumed Knowledge:** If studying Stage 2 Biology as a Year 11, the student must have achieved an A grade in all three areas of Science studied in Year 10.

**Course Description:** Stage 2 Biology is a 20 credit subject in which the topics are prescribed. The Stage 2 Biology subject outline is organised around the following four topics:

Topic 1: DNA and Proteins

Topic 3: Homeostasis

Topic 2: Cells as the Basis of Life

Topic 4: Evolution

Students investigate the structure of DNA and processes involved in the transmission of genetic material to the next generation of cells and to offspring. They also develop an understanding of how genetic information is expressed in cells and organisms, and how this understanding has changed in the light of new technology and new evidence. They study how interactions between genes and environmental conditions influence an organism's characteristics.

Students relate gene expression to protein production and explore some of the many roles that proteins have in a functioning cell and organism. They speculate on the possible outcomes of gene modification and discuss the associated ethical implications and consequences. Students develop an understanding of the increased capacity of technology to acquire and process genetic data, and explore some of the social, environmental, and economic impacts of scientific research in this area as they continue to develop their social and personal capability.

Students will examine the cell theory, the structure and function of the cell membrane, the exchange of materials, and processes required for cell survival. Students investigate the importance of enzymes in cell metabolism and ways in which energy is transformed and transferred in the biochemical processes of photosynthesis and respiration.

Students investigate events that occur during binary fission and mitotic cell division, and how they determine the degree of similarity between parent cells and daughter cells. They also consider the importance of culturing cells, and chemicals that interfere with cell metabolism.

Students explain how the evolution of cells from simpler to more complex structures and functions may have occurred

Students will examine some of the body systems, including the nervous, endocrine (hormonal), and excretory systems that play interdependent roles in the regulation of body processes such as body temperature, blood glucose levels, carbon dioxide levels in blood, and water balance. They relate the structure of the cells, tissues, and organs of these systems to their function.

Students develop an understanding of how homeostasis through the stimulus response model is the whole set of responses that occur in multicellular organisms, which enable their survival in their environment. Students develop an understanding of how homeostasis is maintained and may involve negative feedback responses.

Students investigate the genetic basis for the theory of evolution by natural selection through constructing, using, and evaluating explanatory and predictive models for gene pool diversity of populations. They explore genetic variation in gene pools, selection pressures, and isolation effects in order to explain speciation and extinction events and make predictions about future changes to populations.

Through the investigation of appropriate contexts, students explore ways in which models and theories have developed over time. This includes changes in the understanding of natural selection, evolution, and population genetics, and the technologies used to investigate them. They discuss the influences and impacts of social, cultural, economic, and ethical considerations of habitat change.

**Assessment:**

**School-based Assessment (70%)**

Investigations Folio: 30%

Skills and Applications Tasks: 40%

**External Assessment (30%)**

Examination

## Stage 2 Chemistry

**(20 Credits)**

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**Assumed Knowledge:** Students should have achieved at least a B Grade in Stage 1 Chemistry

**Course Description:** In their study of Chemistry, students develop and extend their understanding of how the physical world is chemically constructed, the interaction between human activities and the environment, and the use that human beings make of the planet's resources. They explore examples of how scientific understanding is dynamic and develops with new evidence, which may involve the application of new technologies.

Students consider examples of benefits and risks of chemical knowledge to the wider community, along with the capacity of chemical knowledge to inform public debate on social and environmental issues. The study of Chemistry helps students to make informed decisions about interacting with and modifying nature, and explore



options such as green or sustainable chemistry, which seeks to reduce the environmental impact of chemical products and processes.

Through the study of Chemistry, students develop the skills that enable them to be questioning, reflective, and critical thinkers; investigate and explain phenomena around them; and explore strategies and possible solutions to address major challenges now and in the future (for example, in energy use, global food supply, and sustainable food production).

Students integrate and apply a range of understanding, inquiry, and scientific thinking skills that encourage and inspire them to contribute their own solutions to current and future problems and challenges, and pursue future pathways, including in medical or pharmaceutical research, pharmacy, chemical engineering, and innovative product design.

The course covers the following four compulsory topics:

Topic 1: Monitoring the Environment  
Topic 2: Managing Chemical Processes

Topic 3: Organic and Biological Chemistry  
Topic 4: Managing Resources

**Assessment:**

**School-based Assessment (70%)**

Investigations Folio: 30%

Skills and Applications Tasks: 40%

**External Assessment (30%)**

Examination

## Stage 2 Physics

**(20 credits)**

**Assumed Knowledge:** Students should have achieved at least a B Grade in Stage 1 Physics

**Course Description:** The topics in Stage 2 Physics provide the framework for developing integrated programs of learning through which students extend their skills, knowledge, and understanding of the three strands of science.

The three strands of science to be integrated throughout student learning are:

- science inquiry skills
- science as a human endeavour
- science understanding

**Topic 1: Motion and Relativity** - Projectile Motion, Forces and Momentum, Circular Motion and Gravitation, Relativity

**Topic 2: Electricity and Magnetism** - Electric Fields, Motion of charged particles in electric fields, Magnetic Fields, Motion of charged particles in magnetic fields, Electromagnetic Induction

**Topic 3: Light and Atoms** - Wave behaviour of light, Wave-particle duality, Structure of the atom, Standard Model

Students study all three topics. The topics can be sequenced and structured to suit individual groups of students.

**Assessment:**

**School-based assessment (70%)**

Investigations Folio 30%

Skills and Application Tasks 40%

## External Assessment

External examination 30%

## Stage 2 Design & Technology:

### Digital Communication Solutions – CAD

(20 Credits)

**Assumed Knowledge:** Year 10 or Year 11 Design & Technology CAD (but not a requirement)

**Course Description:** This is a practical based subject in which students will use a range of Computer Aided Design processes and techniques to design and make products using 3D Parametric CAD Software, in the context of communication products.

All students will complete three compulsory Skills and Applications tasks that will comprise one Materials Application task and a two Specialised Skills tasks.

Students will complete a Design Folio to research and develop their individual major and minor products. The Design Folio includes Investigation, Planning, Production Record, Issues task and Evaluation tasks. Students produce and present their Major and Minor product designs using a range of specialised 2D and 3D software applications.

**Assessment:** Assessment at Stage 2 requires students to demonstrate evidence of their learning through the following assessment types:

#### School-based Assessment (70%)

Skills and Applications Tasks 20%

Product 50%

#### External Assessment (30%)

Folio 30%. Folio is sent to SACE for final moderation

## Stage 2 Design & Technology: Robotic and Electronic Systems – Coding and Automation

(20 Credits)

**Assumed Knowledge:** Year 11 Systems and Control

**Course Description:** Students will build on their existing knowledge and skills to design, plan, test, modify and evaluate an Arduino microcontroller-based project. The scope of the project will be free choice requiring the end product to have multiple inputs and outputs. Students will use existing coding as well as writing their own to control the hardware. With the emphasis being on electronics, both the coding and the physical product will be assessed.

- Examples of possible project ideas:
- Drones – land, air or sea
- Alarm systems
- Bluetooth control
- Autonomous vehicles
- Wifi control
- Wifi home automation

**Assessment:** Assessment at Stage 2 requires students to demonstrate evidence of their learning through the following assessment types:

#### School Assessment (70%)

Assessment Type 1: Skills and Applications Tasks 20%

- Two specialised skills tasks
- One materials application task

Assessment Type 2: Product 50%

- One minor product
- One major product

#### **External Assessment (30%)**

Assessment Type 3: Folio 30%

- Product design – analysis and documentation
- Product evaluation
- Folio is sent to SACE for final moderation

## **Stage 2 Design & Technology:**

### **Material Solutions – Metal**

**(20 Credits)**

**Assumed Knowledge:** Year 10 or Year 11 Design & Technology: Metalwork (but not a requirement)

**Course Description:** This is a practical based subject in which students will use a range of metalworking processes and techniques to design and make products using the resistant material metals, in the context of material products.

Students will complete two compulsory **Skills Tasks** where they will:

Document skill development in practice welding activities through photographic evidence with recorded oral discussion or written comments. Student evaluate their learning in undertaking the task through one or more capabilities and state its relevance in the design and realisation process.

Students will also undertake a **Design Process and Product** where they will:

Investigate and create a design brief. Investigate and analyse products that clearly connect to their design brief. Throughout the investigation students will explore product features such as function, aesthetics and constraints in direct relation to their brief.

Design, develop and plan concepts that they have analysed from their investigation. Create a variety of solutions for the brief using drawings and sketches. Validate a designed solution that best meets the brief and develop a series of drawings to support their production process. Student will develop a materials and costing list for the product, as well as a procedure and schedule for the safe and timely manufacture of their product. Produce a product by applying skills, processes, procedures and techniques to create the product that best meets their design brief.

Evaluate the design process and product they have created in response to their design brief as well as their product realisation.

Students will produce a **Resource Study** comprising of:

**Resource Investigation:** Students will investigate and analyse the functional characteristics and properties of two or more materials of their choice. Students will create a series of tests to generate data on the functional characteristics of the materials.

**Issues Exploration:** Students will also investigate the sustainability of the materials they test and explore ethical issues related to their designed solution.

#### **School-based Assessment (70%)**

Skills and Applications Task 20%

Product 50%

**External Assessment (30%)**

Folio 30%. Folio is sent to SACE for final moderation

## Stage 2 Design & Technology:

### Material Solutions – Wood

**(20 Credits)**

**Assumed Knowledge:** Year 10 or Year 11 Design & Technology: Woodwork (but not a requirement)

**Course Description:** This is a practical based subject in which students will use a range of woodworking processes and techniques to design and make products using the resistant material wood, in the context of material products.

All students will complete three compulsory Skills and Applications tasks that will comprise one Materials Application task and a two Specialised Skills tasks.

Students will complete a Design Folio to research and develop their individual major and minor products. The Design Folio includes Investigation, Planning, Production Record, Issues task and Evaluation tasks. Students produce and present their Major and Minor product designs using a range of specialised woodworking tools and techniques.

**Assessment:** Assessment at Stage 2 requires students to demonstrate evidence of their learning through the following assessment types:

**School-based Assessment (70%)**

Skills and Applications Task 20%

Product 50%

**External Assessment (30%)**

Folio 30%. Folio is sent to SACE for final moderation

## Stage 2 Visual Arts: Art

**(20 Credits)**

**Assumed Knowledge:** No prerequisites or assumed knowledge; however, previous experience in Art, Design, CAD or Design Technology in year 11 is desirable. Students can enter the course with limited previous exposure to art but must have an interest in art and in developing their skills

**Course Description:** Visual Arts – Art is a practical course in which students work independently to specialise in art disciplines, themes, methods and materials that they are passionate about. For instance, a student may choose to explore the theme of identity through portraiture in painting and mixed media, or texture, pattern and representation of place through ceramics. Students select artists and art movements related to their area of interest to analyse, interpret and evaluate and to inspire their own artistic practice.

Visual Arts – Art encourages students to bring their own personal experiences, ideas and beliefs to their artistic practice to communicate visually with others, and to make connections between their works and the works and ideas of other artists. To assist with this, students will be required to engage in excursions, workshops and forums both during and out of class time.

**Course Content** Students complete 3 major units of work:

**Visual Studies - 30%**

Students complete two Visual Studies based on an aspect experimental and/or experiential focus of work.

**Folio – 40%**

Students complete two folios supported by developmental and preparatory work. The nature of the folio can be 2-dimensional, 3-dimensional or a combination of both.

The folio includes the ideation, research and development of student visual ideas on a set class theme, culminating in the planning for a final practical artwork.

**Practical – 30%**

Students complete two practical works linked to each of their folios. The practical work is resolved from visual thinking and learning documented in the folio and includes artworks and a practitioner's statement.

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**Stage 2 Visual Arts: Design****(20 Credits)**

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**Assumed Knowledge:** There are no pre-requisites or specific assumed knowledge, although, some experience in Year 10 or 11 Art or Design is desirable. Nevertheless, students can enter the course with limited previous exposure to design.

**Course Description:** Visual Arts: Design is a practical based subject which allows students to explore a range of design disciplines, including Graphic Design, Product Design, Architecture and Landscape Design, Fashion Design and Multimedia. Students are able to specialise in one or more disciplines of design which allows them to research, explore and experiment within a design setting. Students will have the opportunity to negotiate all assessment components, so that their individual interests can be catered for. For example, a student may wish to only study and produce work within an architectural setting. Another example would be a student who creates work in a variety of design disciplines like Graphic Design, Multimedia and Fashion Design.

Similarly, there is a great deal of flexibility within the course structure to allow students to showcase their skills in one or more media. Drawing, photography, computer aided design and model making are just some of the media which students can explore within the assessment components.

A key focus of the course centres around each student producing their own practical work, and reflecting upon their creative experiences. The personalised nature of the course allows students to embark upon an individual creative journey which rewards each student for their creative talents and interpretations.

**Assessment:****School-based Assessment (70%)**

2 x Practical projects which showcase separate final solutions to two individual design briefs 30%

1 x Folio which documents the creative process of both practical projects above 40%

**External Assessment (30%)**

Visual study: 20 x A3 pages documenting research and analysis on a design related topic, and integrating personal design work which is influenced by the research and analysis

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**Stage 2 Workplace Practices****(20 Credits)**

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**Assumed Knowledge:** It is preferable to have studied Stage 1 Workplace Practices.

**Course Description:** This course includes three areas of study, all of which are crucial elements of the program.

Area of study 1: Industry and work knowledge - has a focus on assignment based work and includes the following topics: The changing nature of work; Industrial relations; Finding employment; Negotiated topics.

Area of study 2 and 3: Vocational learning and/or VET - requires students to spend some time working in a work environment. This may be as part of a work experience placement, a casual or part-time job, volunteer work or in a school-based traineeship or apprenticeship.

Recommended for students undertaking VET Pathway.

**Assessment:**

**School-based assessment (70%)**

Folio 30%: This will include assignments with regard to area of study one and may be written tasks, oral presentations, posters etc.

Performance 20%: This will be an assessment of a student's development of skills within the workplace or VET environments

Reflection 20%: This will be a reflection of a student's experiences within the workplace or VET environments and another on how work ready they now feel

**External assessment (30%)**

Practical Investigation: Students undertake a practical investigation based on a product, task, or service related to their experiences of work and workplace contexts.

OR

Issues Investigation: Students undertake an investigation of a local, national, and/or global issue, culture, or environment relating to their experiences of work and workplace contexts, and/or one or more of the Industry and Work Knowledge topics studied.