

2021 EDITION



APPLECROSS

SENIOR HIGH SCHOOL
INDEPENDENT PUBLIC SCHOOL

Curriculum Handbook

YEAR | 9

Achieve

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Compulsory Subjects

Subject	Number of Hours
English	4 hours per week for the year
Mathematics	4 hours per week for the year
Science	4 hours per week for the year
Humanities and Social Sciences	4 hours per week for the year
Gifted and Talented Art	2 hours per week + 4 hours on Saturday
Health Education	1 hour per week for the year
Physical Education (or Specialist Tennis)	2 hours per week for the year (4 hours per week for Specialist Tennis)
Total Compulsory Subjects	19 hours per week
The Arts Health & Physical Education Languages Technologies Humanities and Social Sciences Science	6 hours per week (Must include: 1 Arts and 1 Technologies in the total electives for the year)
Overall Total	25 hours per week

Literacy and eLearning:

eLearning is an essential component of teaching and learning experiences in the 21st century classroom. Digital platforms are used as a means of teaching, learning and assessment across subject areas. Curriculum-aligned lessons enable a personalised learning experience with immediate feedback catering to each student's needs.

In Lower school English, Science and Languages, online assessment contributes to ways in which we report to parents on student learning. The use of digital platforms as a means of developing Literacy skills is critical to NAPLAN Online and OLN readiness.

Note

Specialist Tennis students will have two electives at 2 hours/week each per semester.

Special Art students are required to select both Special Art Units and one other Art Course in Semester One or Two.

List of Proposed Excursions – A list will be available for all subjects from 1 December the year preceding studies. This will be available under the 'Back to School' tab on the school's website.

All course costs are given as a guide only. These are based on the 2020 pricing structures and are subject to change in 2021.

Deadlines for Subject Changes

Change	Course	Deadline
Year 7	Music	In consultation with Music Teacher
Year 7	Specialist Tennis	In consultation with Specialist Tennis Coordinator
Year 8	Music	In consultation with Music Teacher
Year 8	Specialist Tennis	In consultation with Specialist Tennis Coordinator
Year 9	Electives	Semester 1 – End of Week 3, Term 1 Semester 2 – End of Week 2, Term 3
	Specialist Tennis	In consultation with Specialist Tennis Coordinator
	Music	In consultation with Music Teacher
Year 10	Electives	Semester 1 – End of Week 3, Term 1 Semester 2 – End of Week 2, Term 3
	Specialist Tennis	In consultation with Specialist Tennis Coordinator
	Music	In consultation with Music Teacher

The Arts

PERFORMING ARTS

MUSIC

The Music program is a three-part package, which consists of:

- Class Music elective
- Instrumental lessons
- Ensemble membership

An important definition:

Instrumental Music School Services (IMSS) is the Department of Education's instrumental lesson program available in most government schools throughout Western Australia. You may know of it as 'SIM' or 'SIMS'.

ELIGIBILITY FOR THE MUSIC PROGRAM

There are two ways to be eligible for Music at Applecross Senior High School:

1. Continue your IMSS instrument
2. Continue a privately taught instrument – please see Ensembles list below.

Please note these aspects of Instrumental Music School Services policy:

1. IMSS does not normally allow students to change instruments.
2. Privately taught students are not normally permitted to enter the IMSS program.

ENSEMBLES

Year 9 students participate in one of the following ensembles, depending on their level of advancement:

- Either Concert Band 2 or Concert Band 1 (flute, clarinet, saxophone, trumpet, trombone, euphonium and percussion)
- Either Cygnet String Orchestra or Scimitar String Orchestra (violin, viola, cello and double bass)
- Either Junior Guitar Ensemble or Senior Guitar Ensemble (for classical guitar only)
- Chamber Choir (for all vocal students from Year 7-12...other keen Music students are also welcome)

Each year, auditions are held so that more advanced students are able to progress to the senior ensembles (Concert Band 1, Scimitar String Orchestra and Senior Guitar Ensemble). The auditions assess the student's capacity to play at the appropriate technical level for these ensembles. Information about auditions is made available in newsletters and Connect notices.

PERFORMANCES

Typically, Year 9 students perform in these events each year:

1. Term Two *Autumn Concerts* (junior ensembles)
2. Term Three *WA Schools' Festivals*
3. More advanced students (senior ensembles) will be involved in the Term One *Senior Concerts* and the Term Three *Spring Concerts*
4. Term Four *Under the Stars Picnic Concert* (all ensembles)

Class, Instrumental and Ensemble Music – gMUS and gMUSB (Semester 1 & Semester 2)

Class Music is designed for students to develop skills that are vital to successful instrumental and ensemble performances. In this course, students will develop skills in listening awareness (aural perception) and basic music knowledge (theory). They will also express themselves through composition and arrangement activities, as well as gaining an understanding of what makes us listen to, and enjoy music of different eras, cultures and styles (Music in Society). Practical music-making activities are a small but regular component of this course.

The cost of this course in 2020 was \$45.00 per semester.

Additional costs:

1. IMSS students who are eligible to hire an instrument will have to pay an annual fee. In 2020 this was \$170.00.
2. More advanced students in senior ensembles participate in the Term One *Senior Ensembles Rehearsal Camp and Primary Schools Concert Tour*. The cost of this excursion in 2020 was \$250.00.

Special Conditions: Completion of courses 8MUS and 8MUSB is a prerequisite for studying these Year 9 music courses. If these courses have not been completed, an interview with the Teacher in Charge of Music is required. Students must learn a musical instrument at school or privately.

Dance

Dance embodies our ideas, thoughts, emotions and values and provides a unique opportunity to develop physically, creatively, aesthetically, emotionally and intellectually. The Dance course at Applecross SHS, develops and presents ideas through a variety of genres, styles and forms, as it provides a unique way in which to express our cultural views and understanding of the world. Students will gain an understanding of the physical competencies specific to dance and reflect on, respond to, and evaluate how dance styles and forms are historically derived and culturally valued. Through participation in the Dance course, the students will develop transferable skills essential to their respective futures. These include communication skills, collaborative teamwork skills, negotiation and conflict resolution skills, problem solving skills as well as the ability to organise, analyse and evaluate. Participation in this subject may lead to opportunities for future study in dance or related arts fields.

Dance - gDAN (Semester 1)

Introduction to Jazz, Hip Hop and Contemporary Dance

This is the first course of dance in a series of four and provides the student with a background in the fundamental skills and technique of dance. It is not just for "beginners" but forms the basis of study for all other courses in this area with specific emphasis on Jazz, Hip Hop and Contemporary styles. ALL levels of dance experience will be catered for and no previous dance experience is necessary. It is possible that students may attend an external dance performance and have an external specialist tutor to provide specific skill instruction during this subject.

The cost of this course in 2020 was \$70.00

Dance - gDANB (Semester 2)

Culture and Choreography

This course provides opportunities for students to extend the skills learned previously using multi-cultural styles as a medium of expression. Classes will include technique, small group work and the opportunity to create movement sequences in a variety of styles. Cultural dances will be selected from such continents/countries as Asia (Thai, Balinese, Chinese and India (Bollywood)), Australia (Indigenous), The Americas (Hawaiian, Cheerleading, Line Dancing, Mexican), Africa and Europe (Irish, Spanish, Scottish). Visiting dance troupes, attendance at external dance performances and specialist dance instructors will be highlights in this fun-filled course!! No dance experience is necessary, as all levels will be catered for.

The cost of this course in 2020 was \$70.00

Drama

Drama – 9DRA (Semester 1)

While some students intend to make a career in Drama related fields, they also participate in Drama for enjoyment and satisfaction. They experience the pleasure that comes from developing personal skills, knowledge and understanding that can be transferred to a range of careers and situations. In the Year 9 Semester 1 Drama course, students learn and extend on their skills of vocal, non-verbal and improvisation. Students also participate in a professional Commedia dell 'Arte workshop and use their new skills to devise a whole class performance to a live audience. This devised performance includes the development of design skills for costume and set. Throughout this semester there will also be opportunities to view live theatre productions. Importantly the course is excellent in extending personal expression and enhancing creativity, confidence and self-esteem.

The cost of this course in 2020 was \$20.00

Drama – 9DRAB (Semester 2)

In the Year 9 Semester 2 Drama course, students learn and extend on their skills of vocal, non-verbal and devised theatre practices. Students also participate in a professional devised theatre workshop and use their new skills to devise a whole class performance to a live audience. This performance includes the development of design skills for costume and set. Throughout this semester there will also be opportunities to view live theatre productions. Importantly the course is excellent in extending personal expression and enhancing creativity, confidence and self-esteem.

The cost of this course in 2020 was \$40.00

Visual Arts

Special Art Printmaking

9SPA (Semester 1)

This course will explore the techniques associated with relief-printing and intaglio. Students will develop Art Language specific to Printmaking, an understanding of the conventions of Printmaking and an appreciation for the role of Printmaking in the history of human development. They will discover the importance of careful drawing and design preparation to produce controlled Printmaking investigations. Students will produce at least one major work for display.

The cost of this course in 2020 was \$65.00 per semester.

Special Art Fibre Textiles

9SPAB (Semester 2)

Students will explore a range of fabric-printing techniques and/or dyeing, stitch, embroidery, applique etc to produce a finished functional or non-functional textiles piece. Students will develop Art Language specific to Textiles and an understanding of the conventions of Textiles and an appreciation for the role of Textiles in the history of human development. They will produce at least one major work for display.

The cost of this course in 2020 was \$65.00 per semester.

NOTE: The Special Art courses are available only to selected Gifted & Talented Visual Art students. Please note that an additional Special Art charge applies. This costing in 2020 was \$380

Design – 9DES/9DESB

In 9DES, students will learn how to develop artistic (traditional and digital) skills using industry standard design software such as Adobe Photoshop, Illustrator and InDesign. Students will be introduced to the processes of design, creativity and problem solving, gaining a deeper understanding of how design works, and how beliefs, values, attitudes, messages and information are effectively communicated. Students will be given the opportunity to develop images (both photographic and illustrated) into computer-generated designs. Areas explored may include: Graphic Design, Photography, Digital Art, Image Manipulation and 2 Dimensional and Mixed media.

The cost of this course in 2020 was \$65.00 per semester.

NOTE: The content for this course will be unique and different in each semester so you are able to enrol in either or both semesters.

History of Art –9HART/9HARTB

Students will study the History of art from caveman to modern day. We will look at the reason we make art and the purpose of artefacts back to the stone age. We will explore how and why art changes with time.

The approximate cost of this course in 2020 will be \$10.00 per semester.

NOTE: The content for this course will be unique and different in each semester so you are able to enrol in either or both semesters.

Media: Zines & Influencers – 9MED/9MEDB

Students explore current viewpoints of Australian and/or international media work as they make online and print media formats. Students learn skills and processes for problem-solving, working as a team, following timelines and using processes and strategies to ensure creative and responsible use of media equipment. Media focus options may be either Media Fiction (for example: online media streaming, printed comics zines and graphic novels) or Media Non-Fiction (news & current affairs).

The cost of this course in 2020 was \$65.00 per semester.

NOTE: The content for this course will be unique and different in each semester so you are able to enrol in either or both semesters.

Photography–9PHO/9PHOB

In Photography students learn how to use digital cameras on manual settings and explore Adobe software creatively. They develop their ideas and techniques to make artworks for either a Design or Fine Art outcome. Students explore use of light, elements and principles of design and composition through both the use and study of new and traditional photographic media. Art styles studied may include: 20th Century Australian design.

The cost of this course in 2020 was \$65.00 per semester.

NOTE: The content for this course will be unique and different in each semester so you are able to enrol in either or both semesters.

Visual Art –9ART/9ARTB

In Visual Art students make resolved artworks in either 2 or 3 dimensions. They learn how to document ideas applying understanding of compositional structure to create a unique personal response, while representing either a theme/concept or subject matter. Students also critically analyse traditional and contemporary artwork using analysis frameworks. Art forms may include: painting, printmaking, drawing, collage, ceramics and sculpture. Art styles studied may include: ancient art, impressionism, expressionism, cubism, art nouveau, art deco, op art, pop art, Australian art, contemporary craftspeople, designers and photographer and urban art.

The cost of this course in 2020 was \$65.00 per semester.

NOTE: The content for this course will be unique and different in each semester so you are able to enrol in either or both semesters.

English

Students learn about the English language and how to use it effectively. The study of English plays a vital role in the development of literacy, enhances students' learning in all areas of the curriculum and provides them with the communication skills and critical understanding of language necessary for active participation in society. All students will study the Australian Curriculum English Course. The Academic Extension classes explore a wider range of more difficult texts. Creativity, critical thinking, Grammar and English skills of communication are the basis of all courses. Wide reading is encouraged through all courses to improve literacy. There is an explicit focus on Reading and Writing skills in Year 9 prior to NAPLAN testing. Students are encouraged to aspire to a Band 8 or above in NAPLAN, as achieving this means that they are not required to complete the OLNA Reading and Writing tests in Year 10 to achieve graduation.

English – gENG

Students study a general course of English focusing on **Language, Literacy and Literature**. Students study and practise persuasive writing skills as well as narrative form in texts, with a focus on short stories. Students will also study current affairs to look at persuasive techniques across a range of mediums. Reading comprehension and grammatical skills continue to be developed, primarily through the use of the online program, *Education Perfect*.

In Semester Two students will study a novel, song lyrics and film texts. They will write using a variety of text forms including a review and will immerse themselves in imaginative writing. They continue to develop writing in essay form. Students will participate in regular common task assessments throughout the year.

Academic Extension – gENGE

In addition, Academic Extension students begin the year discussing the theme of morality and will study the moral theories of famous philosophers. This will lead into writing a narrative where the protagonist must face a moral dilemma. Following on from this, the students will be given an opportunity to write and present a persuasive speech that is supported by one of the moral theory studies in class. In Term Two, they will read and analyse a variety of autobiographical texts in order to understand the importance of personal context. To end the semester, the students will explore the theme of power through analysing how media texts can challenge or perpetuate social stereotypes. They will storyboard and present a short advertisement that reconceptualises a common stereotype.

In Semester Two, the students will study poetry with an emphasis on exploring personal identity. In order to do this, students will analyse famous poems, as well as write a poem based on the theme of identity. Studying a novel with a focus on moral issues, in conjunction with the social and cultural contexts of its characters, completes Term Three. In preparation for the exam in Term Four, the students will study a film that explores philosophical and ethical ideas and how it positions the viewer to think.

Throughout the year, Interactive Notebooks will be used to engage with creative writing, as well as analysing reading and viewing texts.

English as an Additional Language/Dialect gESL

These courses are based on the Australian Curriculum English Course (see English courses for more details) but are tailored to suit the needs of Non-English Speaking Background students who have been in Australia, or any English speaking country for fewer than three years. Some students who have been here longer may also be accepted into the courses if numbers permit. Entry to these courses is on approval from the EAL/D Teacher in Charge or the Lower School Deputy. In all EALD courses, students will demonstrate the skills through reading and viewing, speaking, listening and writing.

The cost of these courses in 2020 was \$36.00

Health and Physical Education

Health Education – gHED

In this course, Year 9 students will identify and apply relevant criteria to determine the reliability of online health information. They will evaluate a range of characteristics of respectful relationships, such as showing respect for self and others, personal differences and opinions. They will describe and apply appropriate skills and strategies to resolve and manage conflict within different environments. Other topics covered include Sexual Health, Alcohol Education, First Aid, Mental Health and Lifestyle Diseases.

The cost of this course in 2020 was \$7.50

General Physical Education

gPES (Semester 1)

gPESB (Semester 2)

Students will select and use individual movement skills and sequences that increase in complexity and perform them with increased speed, control and improved accuracy. They will implement tactics and adapt them in response to performance. In competitive contexts students will learn to participate ethically, further develop their leadership skills and demonstrate ways to build motivation and encourage team work. Students will also develop an understanding of projectile motion and force summation.

Over the course of Years 7-10 students will cover a broad range of sports developing fundamental movement skills, both land and water based.

The cost of this course in 2020 was \$9.75 per semester.

Physical Recreation/Fitness

gFIT (Semester 1)

gFITB (Semester 2)

By participating in fitness improvement activities on the school site, this course will provide students with the opportunity to develop a deeper understanding of the following fitness components in a challenging and enjoyable environment:

- Cardio-respiratory endurance
- Muscular endurance
- Muscular strength
- Flexibility
- Co-ordination
- Speed

Students will learn how to develop fitness and implement dietary programs. Course instruction will include some in-school fitness sessions that will be run by Guest Fitness Instructors.

The approximate cost of this course in 2020 was \$100 per semester.

Specialist Tennis

gTEN1 / gTEN2 (Semester 1)

gTEN3 / gTEN4 (Semester 2)

Students will continue to develop all aspects of their tennis game, with a greater emphasis on advanced tactical and technical aspects of each individual student's game style. Advanced doubles tactics will continue to be developed, as well as mental skills training, movement and injury prevention and management. These aims will be achieved through on court drills, match play, fitness and off court sessions. The cost of this course in 2020 was \$135.00 for the year.

NOTE: The course is available for students selected into the Specialist Tennis program only.

Humanities and Social Sciences

gHASS

In Year 9, Humanities and Social Sciences consists of Civics and Citizenship, Economics and Business, Geography and History.

- Australian political parties
- The industrial revolution
- WWI depth study
- Global interconnections – Globalisation
- Economics
- Biomes and food security
- The Australian legal system

In Civics and Citizenship students continue to build on their understanding of the concepts of the Westminster system, democracy, democratic values, justice and participation. They examine the role of key players in the political system, the way citizens' decisions are shaped during an election campaign and how a government is formed. Students investigate how Australia's court system works in support of a democratic and just society.

In Economics and Business, students are introduced to the concepts of specialisation and trade while continuing to further their understanding of the key concepts of scarcity, making choices, interdependence, and allocation and markets. They also examine the connections between consumers, businesses and government, both within Australia and with other countries, through the flow of goods, services and resources in a global economy. The roles and responsibilities of the participants in the changing Australian and global workplace are other topics that will be explored.

In Geography the concepts of place, space, environment, interconnection, sustainability and change continue to be developed as a way of thinking, which provides students with an opportunity to inquire into the production of food and fibre, the role of the biotic environment and to explore how people, through their choices and actions, are connected to places in a variety of ways.

In History students develop their historical skills within the context of the making of the modern world from 1750 to 1918. They consider how new ideas and technological developments contributed to change in this period, and the significance of World War I is also investigated.

Academic Extension – gHASSE

Students meeting the selection criteria will also be offered extension activities in Humanities and Social Sciences in a dedicated Academic Extension class with a focus on higher order thinking skills and the innovative use of information and communications technology. Students may be offered in and out of the Academic Extension class as the year progresses.

All Academic Extension HASS students will need to be prepared to participate in numerous competitions throughout the year. Some require time outside of class to prepare. In Year 9 activities may include the Australian History Competition, the Australian Geography Competition, the ASX School Sharemarket Game and the Premier's Anzac Student Tour competition.

The cost of all HASS pathways in 2020 was \$36.00

Financial Literacy

gFIN (Semester 1)

Knowing how to manage money and make confident and informed financial decisions are core life skills. This course recognises and supports students to develop good money habits.

Financial literacy is the joining together of financial, credit and debt management and the knowledge that is necessary to make financially responsible decisions – decisions that are integral to our everyday lives. Financial literacy includes understanding how a bank account works, what using a credit card really means, and how to avoid debt.

In this course students will develop understanding and skills in cash management, borrowing money, personal budgeting, personal investment and tax.

The approximate cost of this course in 2020 is \$10.00

Personal Financial Management

gPFM (Semester 2)

Personal financial management means gaining an understanding of your financial situation in order to make the most of your assets in day-to-day life and in planning for your future. Financial planning is the process of managing your money to achieve personal economic satisfaction.

It allows you to control your financial situation and provides a feeling of security and less stress. It is a disciplined approach to managing your finances to reach life goals.

In this course students will develop understanding and skills in calculating costs for travel, buying a car, getting a pet and acquiring mobile phones. They will also look into security and privacy issues relevant to using e-commerce products and the costs/benefits of loyalty programs.

The cost of this course in 2020 was \$10.00

Languages

Students learn to communicate effectively in languages and further develop their skills and understandings in English. They gain an understanding of other societies, the ability to interact with people and cultures other than their own, and practical skills which they can use in future social, cultural and vocational areas. We have exchange programs to France and to Takarazuka, Japan. Students from Years 9 to 11 may participate in these programs. Year 9 students must continue with the language they studied in Year 8.

Content Structure

The Year 9 French and Japanese Second Language curriculum is organised into two interrelated strands: Communicating and Understanding. Together, these strands reflect three important aspects of language learning: performance of communication; analysing various aspects of language and culture involved in communication; and, understanding oneself as a communicator.

Communicating: The Communicating strand focuses on students learning to use the target language to interpret, create and exchange meaning and to use the language to communicate in different contexts. It involves learning to use the target language for a variety of purposes.

Understanding: The Understanding strand focuses on students analysing and understanding language and culture as resources for interpreting and shaping meaning in intercultural exchange. Therefore, students will develop their language skills through listening and responding, viewing, reading, speaking and writing in French and Japanese.

French – 9FRE (Semester 1)

9FREB (Semester 2)

Students will learn about outdoor activities, weather, clothing, shopping, food and drink. They will learn about body parts, asking what is wrong with someone, describing symptoms and asking and saying what needs to be done. They will also learn about the different means of transports in France and do comparison with Australia. They will learn to use regular and irregular verbs in the present tense and perfect tense. Students will use semi-auxiliaries to say what they can do or what they want to do. They will use a range of adjectives and adverbs and learn to use comparatives to say what is more than, less than or as much as when giving opinion. Students

will participate in group work, cultural activities and ICT activities.

The cost of this course in 2020 was \$10.00 per semester.

Japanese – 9JP (Semester 1)

9JPB (Semester 2)

Students will master katakana and be introduced to a range of new kanji. They will learn to talk about their personal history, including where they grew up, the language they speak at home and milestones. They will compare healthy food and fast foods in Japanese and learn all about shopping in Japan and the useful language associated with that. Students will participate in activities about neighbours and the neighbourhood. They will learn linking sentences, telling reasons, and comparison. Students will participate in group work, cultural and ICT activities. Students will develop their language skills through listening and responding, speaking, viewing and reading, and writing in Japanese. This course is designed for second language learners. Background speakers of Japanese will be required to enrol in French.

If in doubt, please contact the Teacher in Charge of Arts and Languages.

The cost of this course in 2020 was \$10.00 per semester.

Mathematics

Mathematics – gMAT

Students will use ideas about number, algebra, measurement, geometry, statistics and probability and mathematical ways of representing patterns and relationships, to describe, interpret and reason about their social and physical world. Mathematics plays a key role in the development of students' numeracy and assists learning across the curriculum.

Year 9 students will be placed into streamed classes based upon their Year 8 results. Even with the streaming, the majority of students will study a common course throughout the first semester of Year 9. Only the least able students will be selected for a slower paced course. Further pathway division will occur in Semester 2 but teaching at Pathways E, 1, 2 and 3 will follow a common core with some extension and added depth at Pathway E and 1. Students in Pathways 2 and 3 who make very strong progress will have the opportunity to attempt Pathway 1 in Year 10 without substantial disadvantage.

Academic Extension - gMATE

The Academic Extension class will complete all the coursework as well as engaging in extension work.

Academic Extension students will study problem solving strategies, which will be introduced and explained in class by the teacher. The strategies will be developed conceptually throughout lower school. All AE Mathematics students will be prepared to participate in numerous competitions throughout the year. Some require time outside of class to prepare and also to complete.

In Year 9 activities may include the Mathematics Talent Quest, Have Sum Fun Competition, Computational and Algorithmic Thinking Competition and the Australian Mathematics Competition.

Pathway Description

Pathway E is the Academic Extension pathway which covers Pathway 1, but incorporates the extension activities into their course work including problem solving strategies. It is a very demanding but rewarding course.

Pathway 1 is the course that prepares students for the study of any Mathematics course in Years 11 and 12. It can incorporate some of the extension work covered in the Academic Extension course.

Pathway 2 provides a solid grounding in the essentials of Algebra and Number, Measurement and Geometry and Statistics and Probability, for students who wish to study any ATAR courses of study. It is however not rigorous enough to allow for the successful study of Mathematics Specialist courses in Year 11 & 12.

Pathway 3 is slower paced than Pathway 2 but still covers a lot of the rudiments of the higher pathway. For the more successful student in this pathway, the course still offers sufficient preparation for the study of the lower stage ATAR Mathematics course in Year 11. However, most students in this pathway will, if they study mathematics at all, study the general course, Mathematics Essentials beyond Year 10.

The cost of all Mathematics pathways in 2020 was \$36.00

Science

Students investigate, understand and describe the physical, biological and technological world and value the systems and processes that support life on our planet. Science helps students to become critical thinkers who use evidence to construct conclusions.

The Australian Science Curriculum provides opportunities for students to develop an understanding of important Science concepts and processes, the practices used to develop Science knowledge, Science's contribution to our culture and society, and its application to our lives. The curriculum supports students to develop the scientific knowledge, understandings and skills to make informed decisions about local, national and global issues and to participate if they so wish, in Science related careers.

Year 9 students study in one of two pathways or Academic Extension. Those who are placed in the academic extension class need to have performed at the highest level in all Science topics and must be prepared to undertake extra enrichment work in addition to the Year 9 course work. All other students are placed in either Pathway 1 or 2 based on their performance in Year 8.

Science – 9SCI

Biological Sciences

In this topic, students will study the relationships between organisms and their environment and the effects of human activity on organisms and the environment, and the structure, function and co-ordination of the body systems of plants and animals.

Chemical Sciences

In this topic students will learn about acid and bases, chemical reactions, chemical formulae and chemical equations.

Physical Sciences

In this topic, students will study the properties of different forms of energy including light and electricity and how we use these forms of energy to improve our quality of life.

Earth and Space Sciences

In this topic, students will study the formation and structure of the planet Earth, plate tectonics and their effects.

Science Academic Extension – 9SCIE

The needs of academically talented students are specifically catered for through the Academic Extension Program. Students are offered a variety of learning experiences designed both to develop their skills and competencies while providing challenging and motivating learning experiences, including excursions and competition.

The Year 9 students participate in a cross curricular camp between the Science and HaSS departments in Term 3. This camp focusses on biodiversity and students will collect data first hand in the south west jarrah forest by doing quadrat sampling. The nocturnal animal spotlighting experience has been a highlight in the past with students being fortunate enough to see bilbies, burrowing bettongs and bandicoots among other native marsupials. All Year 9s will learn about body systems and anatomy in Term 4, but the Academic Extension class will have the opportunity to attend an excursion to the Anatomy Museum at Murdoch University. Students will participate in heart, lung and brain dissections to learn more about body system we have studied at school and take an interactive tour of the campus.

Pathway Description

Pathway 1 is the course that prepares students for the study of Science in Years 11 and 12.

Pathway 2 provides a solid grounding in the essentials of Science and is for students who will not be choosing ATAR Science subjects in Year 11 and 12.

The cost of all Science pathways in 2020 was \$40.00

STEAM: Future Technologies

What is STEAM? It is an interdisciplinary approach to learning where rigorous academic concepts are coupled with real-world lessons as students apply science, technology, engineering, the arts and mathematics in contexts that make connections between school and the real world through creativity, aesthetics, ethics and communication.

Why STEAM? We should be developing the mindset of preparation for the future. We will embark on a journey discovering what the 21st Century skills will be and how to prepare ourselves in that context.

Shark Tank – 9SHK (Semester 1)

Ever considered being an entrepreneur? Ever felt the urge to undertake the challenge of Shark Tank? Well, this is your opportunity to discover something new about yourself. We are all individuals and now is the time for our individuality to shine. Projects will be entirely student oriented and student led within a group. Independence is key in the steps of development using 21st century skills. Teachers will guide you to help you make decisions and facilitate checkpoints and deadlines along the way. The rest of the project for this semester is entirely dependent on the student.

The cost of this course is anticipated to be \$30 excluding entry fees and excursion costs.

The Science of Flight – 9SOF (Semester 2)

Have you ever considered engineering a device that can fly? How would you go about it? This semester, students will be guided by their teacher to discover the history and the passion that led to our kin taking to the sky. They will embark on a journey that leads them through a process of design, review, personal reflection and test flights of the 'aircraft'.

Students will then pursue a trivial first world problem to assist the modern man with their trivial needs.

Technologies

DESIGN AND TECHNOLOGIES

Automotive Workshop – gAUT (Semester 1)

Students will learn about basic car care. They will learn about two and four stroke engines and about engines fitted to lawn mowers and go-karts. Students will become familiar with how an engine works. They will also learn how to carry out panel repairs by learning both gas and electric welding.

The cost of this course in 2020 was \$45.00

Automotive Workshop – gAUTB (Semester 2)

Students will learn how to service small engines and car engines, along with other workshop activities. Students will also learn the function of pistons and rings, valves, carburettor and exhaust systems.

The cost of this course in 2020 was \$45.00

Engineering – Technical

gTGR (Semester 1)

Students will produce drawings in oblique, isometric, orthogonal and perspective using Computer Aided Drafting software. They will learn how architects produce drawings and how engineers use and interpret drawings. Students will produce models using 3D software, 3D printing and laser cutting.

The cost of this course in 2020 was \$10.00

Engineering – Technical

gTGRB (Semester 2)

Students will produce drawings and use a variety of rendering techniques including 3D Computer Aided Drafting software. Architectural impressions are taught in this class including graphical representation techniques. Students will utilise 3D printing and laser cutting to produce design models.

The cost of this course in 2020 was \$10.00

Metalwork – gMTW (Semester 1)

Students will be introduced to basic hand held and machine tool processes and will develop an appreciation of the materials and designs used in metal working. Lathing and polishing of metals is an integral part of these courses. Models made will be interesting and useful: metal trays, barbecue tools and more. The cost of this course in 2020 was \$45.00

Metalwork – gMTWB (Semester 2)

Students will further develop hand and machine tool processes as well as gain an introduction to designs involving welding and other fabrication techniques. Spot welding, polishing, and surface treatment will enable students to produce exciting and useful models: basketball rings, bike stands, camp ovens and bush barbecues.

The cost of this course in 2020 was \$45.00

Woodwork – gWDW (Semester 1)

Students will design and learn skills relating to working in wood, with the opportunity of producing some exciting and innovative projects. These items could be useful in all areas of the home. Use of power hand tools is encouraged. Cutting boards, knife holders, clocks, toys, stools, tool boxes and bowls are some of the models students may choose to design and manufacture.

The cost of this course in 2020 was \$65.00

Woodwork – gWDWB (Semester 2)

Students will make small projects and develop techniques and skills associated with wood as a material. Working with associated wood products such as plywood, laminated timber veneer and particle board will help students to make worthwhile projects and learn skills with modern electrical tools. Knife holders, bowls, footstools, sandboards, skateboard decks and small ladders will be just a few of the items students may choose to design and manufacture. The cost of this course in 2020 was \$65.00

DIGITAL TECHNOLOGIES

Students apply knowledge, skills and resources in the development of practical solutions to problems. Through this process they learn to be innovative, adaptable and reflective as they select and use appropriate materials, information and systems to achieve worthwhile results.

Web Page Design – 9WPD (Semester 1)

This course explores and develops students' skills using web authoring programs. The set tasks will involve manipulating a variety of images using Internet resources. Layout and design skills will be developed.

The cost of this course in 2020 was \$10.00

Computer Systems Design

9CSD (Semester 2)

Here's a chance to learn about the two main components that make up a computer system – hardware and software. Students will investigate the current hardware items on the market and the items that are being developed for the future. They will also be given the opportunity to dabble in software development through the creation of simple computer games using the Kudo program.

The cost of this course in 2020 was \$10.00

HOME ECONOMICS

Home Economics is a fun, hands-on subject area encompassing many life skills. Using a technology and health focus, students are encouraged to use their own initiative to solve problems while working cooperatively with others, using appropriate equipment, and managing time effectively. This is done in the contexts of foods, clothing and textiles and child care/development. The cost of the food courses includes all the food and equipment requirements. The cost of the textile courses includes the use of the sewing equipment; however, fabrics and some sewing aids will need to be provided by the students.

Creative Wear – gCVW (Semester 1)

Creative Wear - gCVWB (Semester 2)

Students will have the opportunity to further develop their skills on the sewing machine to create simple garments and accessories. Students will develop an understanding of the different types of fibres and textiles, their uses and care instructions. They will also investigate the elements of design and how it can impact fashion trends and individual style.

Requirements: Students may be expected to purchase fabric, craft and sewing supplies

The cost of this course in 2020 was \$30.00 per semester.

Food for Health – gFFH (Semester 1)

This course will give students the opportunity to develop their culinary skills and techniques to prepare a variety of dishes that are delicious and nutritious. This subject allows students to develop an awareness of health issues related to diet and investigates healthy eating habits. Students will learn about the different food groups and the effect each food has on the body. Students will explore a variety of eating models that encourage Australians to make healthy food choices. This is a hands on, practical course that promotes the development of independence, encourages working collaboratively and allows students to develop confidence in the kitchen.

Requirements: Students are required to bring a container to all cooking classes.

The cost of this course in 2020 was \$80.00

Food in the Fast Lane – gFFL (Semester 2)

This course allows students to build on and develop their cooking skills taught in previous years. Students will prepare foods for enjoyment and good health. The course focuses on home-made verses commercially prepared foods in terms of cost, nutritional value, time, taste and appearance. Students will learn to analyse personal food intake, interpret food labels and understand health effects of fast food and convenience foods. This is a hands-on, practical course that promotes the development of independence, encourages working cooperatively and allows students to develop confidence in the kitchen.

Requirements: Students are required to bring a container to all cooking classes.

The cost of this course in 2020 was \$80.00

The cost of this course is anticipated to be \$30 excluding entry fees and excursion costs.