

# **WILLETTON SENIOR HIGH SCHOOL**

## **YEAR 9 CURRICULUM HANDBOOK 2023**

Page	
2	Contents
3	Information and Advice
4	Curriculum Overview
6	Assessment and Support Information
	<b>Learning Area Course Information</b>
7	The Arts
10	English
	English as an Additional Language/Dialect - Languages
11	Health and Physical Education
15	Humanities and Social Sciences
17	Languages
18	Mathematics
20	Science
21	Technologies
25	Course Costs Year 9



# Information and Advice

## Elective course changes

Students and parents are advised to think carefully about the choices they make. Student Subject Summaries will be provided in November. These list all the elective subjects assigned to the student. Please check this thoroughly and request any changes before the close of school for the vacation period.

Due to staffing, resources and new enrolments there is little capacity for students to make changes to electives after selections are made. As a result, no changes will be made in 2023 except where there is a serious need and parents may be asked to provide documentation to substantiate this.

## Contacts for Information and Advice (Semester 1, 2022)

The best contacts for information and advice on issues concerning subject choices, pathways to future study and student achievement are the heads of learning areas and curriculum advisors.

### Heads of Learning Area

The Arts	<a href="#">Cheryl Venter</a>
English	<a href="#">Susan Appleton</a>
Health & Physical Education	<a href="#">Wayne Baseden</a>
Humanities and Social Sciences	<a href="#">John Maxwell</a>
Languages, including English as an Additional Language or Dialect	<a href="#">Nathan Harvey</a>
Mathematics	<a href="#">Zoe Tay</a>
Science	<a href="#">Lance Taylor</a>
Technology & Enterprise	<a href="#">Kristen Gibson</a>
Vocational Education and Training	<a href="#">Sue Holland</a>

### Programs Supporting Students at Academic Risk

Learning and Curriculum Support	<a href="#">Zoe Colkers-Thring</a>
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### Special Program Coordinators

Art Extension	<a href="#">Belinda Morrissy</a>
Basketball	<a href="#">Mike Forsyth</a>
Computer Science	<a href="#">Brett Clarke</a>
Gifted and Talented	<a href="#">Darren Hamley</a>
Music and IMSS	<a href="#">Philippa Peake</a> <a href="#">Jenny Templar</a>

### Pastoral Care and Attendance

Program Coordinator Student Services	<a href="#">Tenielle Bright</a>
Year Coordinator	<a href="#">Andrea Wheeler</a>

## Curriculum Overview

The curriculum at Willetton Senior High School is organised around the eight major learning areas and complies with the Western Australian Curriculum and Assessment Outline, which is designed for all students from Kindergarten to Year 10. Details can be found at <https://k10outline.scsa.wa.edu.au/home/p-10-curriculum>. Students are required to undertake studies in each of the eight learning areas: The Arts, English, Health and Physical Education, Humanities and Social Sciences, Languages, Mathematics, Science and Technologies. They are provided a range and variety of learning opportunities within these areas and this enables them to work at a suitable level and to pursue special talents and interests. Information on extra-curricular activities such as Interact, debating, the Duke of Edinburgh Award, enrichment classes and after school sporting teams is available on the school's website.

Each year in a student's schooling builds on earlier work. It develops their skills in investigating patterns, processes and phenomena, and exploring forms of representation and technology. The curriculum in Years 7 to 9 focuses on the consolidation of skills, knowledge and understandings that carry on from primary school. This prior learning is built upon to achieve increased levels of specialisation. Year 10 is a final consolidation of the general requirements of each learning area and in some courses is an introduction to the higher demands of Year 11 and 12 studies. Students are encouraged to realise that their ways of working and thinking are responses to the demands of school and life. It is important that they are able to debate, revise, develop and change to meet the challenges of specialised learning and new context.

Teaching programs help students develop a broader and more comprehensive understanding of the contexts of their lives and the world in which they live. They encourage students to develop an open and questioning view of themselves as active participants in their society and the world. Learning experiences enable students to draw on increasingly diverse and complex sources of information that facilitate comparing, contrasting, synthesising, questioning and critiquing information.

The Guiding Principles of Teaching, Learning and Assessment for the Western Australian Curriculum focus on a school and class environment that is intellectually, socially and physically supportive of learning.

Schools are mandated to deliver the curriculum and assess the students' learning in a manner that adheres to these principles and, therefore, a clear understanding of these principles needs to be shared by the teachers, students and parents. The staff work collaboratively and plan with students and parents to implement them in ways appropriate to the school's population.

Students with identified learning disabilities or who are dealing with severe medical, physical or emotional issues may be eligible for support and adjustment to the curriculum and assessments. The school's curricula and syllabi include the **Western Australian Values of Schooling**, which articulates what educators in Western Australia believe all students should value as a result of the programs they undertake. These are:

- Respect and concern for others and their rights
- Pursuit of knowledge and commitment to achievement of potential
- Self-acceptance and respect of self
- Social and civic responsibility
- Environmental responsibility

## SUMMARY OF THE CURRICULUM

Students will be given a comprehensive subject outline and a description of the assessment tasks during the first week of the academic year and this can be used to guide their studies and for reference by parents/caregivers. The following link leads to detailed information on the Western Australian courses: <https://k10outline.scsa.wa.edu.au>.

### Year Length Courses

English, Mathematics, Science, Humanities and Social Sciences and Health and Physical Education which are compulsory for Year 7 to 10, are conducted over the full year.

Languages are compulsory for Years 7 to 9 and students are may not change the language which they study.

### Semester Length Courses

**Specialist and Extension Courses** – Art, Basketball, Computer Science and Music (Instrumental Music Program)

Students involved in specialist courses are pre-selected through a testing or screening process.

Students involved in specialist classes (other than Gifted and Talented) devote two of the four hours allocated to electives to the specialist course. Please note that, once a student begins the course, there is commitment for the years of middle schooling (Years 7 to 10).

Courses in The Arts and in Technologies are usually semester in length. Most students study **four** of these subjects per year and are required to take one from each of the areas: Visual and Performance in The Arts and Design and Digital in the Technologies. The process for selection of these subjects is outlined on the selection sheet.

The availability of elective units will depend on viable class sizes, structure of the timetable, and the availability of teachers and resources. Students are asked to **select eight units** in order of preference. Every endeavour will be made to give students their top preferences.

The distribution of course hours in the week is:

♦ English - Including EAL/D (English as an Additional Language or Dialect)	4
♦ Mathematics	4
♦ Science	4
♦ Humanities and Social Sciences	4
♦ Health & Physical Education	3
♦ Language	2
<b>Two courses each semester</b>	<b>4 hours per week total</b>
♦ The Arts/Technologies and Other Courses	4 (student selected)

## Assessment and Reporting

The Year 7-10 Assessment and Reporting policy has been developed so that students, parents and staff are aware of their responsibilities in the assessment and reporting process. It is important that we work as a team to ensure all students are able to achieve their personal best. All students and parents are encouraged to read this policy on our website:

<https://www.willettonshs.wa.edu.au/for-parents/school-policies/year-710-assessment-and-reporting-policy/>

## Supplementary Programs and Support for Curriculum Access

These programs depend on a collaborative approach and parents of children who participate are encouraged to keep regular contact with the Learning and Curriculum Support (LCS) team, the class teachers and the Heads of Learning Area. The Program Coordinator Learning and Curriculum Support oversees support and planning for all students with diagnosed disabilities and diagnosed learning difficulties (including ADHD, Dyslexia, Dysgraphia, etc). Support is provided at point of need and can be reviewed as required. Relevant planning and communication to staff is facilitated through the Program Coordinator Learning and Curriculum Support in consultation with families.

## Literacy and Numeracy Development

The Learning and Curriculum Support team coordinates this program. There are two levels. The first has a **modification** to the standard curriculum and supports students with transition to secondary school or from Year 10 to Year 11. The second level, a specifically designed **foundation** course that has a reduction in content to the core concepts and skills and the addition of direct instruction in language skills and foundation concepts. The aim of this course is that students will progress into mainstream classes by Year 10. These programs are delivered in small groups.

## Literacy Fundamentals

Students are identified through on-entry testing and annual reviews of student progress and placement in the program is from Year 7-Year 9. The program utilises best-practice around literacy interventions for young people with/without learning difficulties such as Dyslexia. The program looks at supporting students in attaining the level of literacy required for success in the secondary curriculum. The purpose of these programs is to expand the learning opportunities of students as they move into the general curriculum in Year 10 and Senior School.

The Program Coordinator Learning and Curriculum Support oversees enrolments of all students with diagnosed disabilities and diagnosed learning difficulties (including ADHD, Dyslexia, Dysgraphia, etc.). Support is provided at point of need and can be reviewed as required.



## LEARNING AREA COURSE INFORMATION

### THE ARTS

The Arts are central to the lives of young people. It brings them together in a natural form of expression, it is universal in its communication, it provides a means of expressing ideas and emotions through using sounds, images, words and movement in a way that enhances and entertains our society. Students further develop their skills in communication, collaboration, critical thinking and creativity.

Year 9 courses are designed to provide learning experiences that are both enjoyable and educational. All courses lay the foundation of arts ideas, skills and values in order to provide an extension and deeper understanding for Year 10 course selections.

### PERFORMANCE ARTS

#### Dance (09ADA)

This course provides opportunities for students to further learn and develop their dance and movement skills. Although the emphasis is on contemporary dance, other genres of dance such as hip hop and jazz will be studied. There is a strong emphasis on collaboration in planning and choreographing group dance works, as there are many opportunities for students to create and perform their own dances. These opportunities allow students to focus on retention and clarity of movement, projection and musicality. Students investigate through practical dance classes the evolution of particular dance genres/styles. Students are required to attend all classes appropriately dressed. They may be required to attend some rehearsals and performances out of school hours.

#### Dance for Boys (09ADB)

This exciting course is suitable for new students and for boys who chose dance in Year 7 or 8. Students will be learning street dance, hip hop and other forms of movement. They dance, choreograph and perform often with the help of guest teachers. This course will provide strategies and exercises for improving balance, speed and agility which will enhance performance in all other physical activities. Students are required to attend all classes appropriately dressed and occasionally complete written work. They may be required to attend some rehearsals/performances out of school hours.



## **Drama (09ADR)**

While some students intend to make a career in drama related fields, many participate in drama for enjoyment and satisfaction. They experience the pleasure that comes from developing personal skills, knowledge and understandings that can be transferred to a range of careers and situations. In the Year 9 Drama course, students learn and extend on their skills of vocal, non-verbal and improvisation. Students also participate in a professional stage combat workshop and use their new skills to devise a whole class performance to a live audience. Throughout the course 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.

## **Music (09AMU)**

Students taking this course will be selecting two elective choices - one Semester 1 and one Semester 2. Prerequisites: Year 8 Music (or approval by Music staff). Music and Instrument are complementary courses studied concurrently. Music is studied during school hours, therefore it is necessary to put the music courses on the selection form, and still choose another six courses in order of preference.

Group instruction continues on the chosen instrument for up to 40 minutes per week on a rotating basis. This will be supported by class studies in aural perception, music literacy and literature and ensemble performance. Students who are learning an instrument privately may also enrol in these courses. All students are expected to participate in an ensemble group: Senior Concert Band, Junior Concert Band, String Ensemble, Guitar Ensemble, Percussion Ensemble, Contemporary Guitar Ensemble, Choir or Jazz Band. Some students may be invited to be involved in more than one ensemble.

## **Piano Keyboard (INPK)**

This class is run on a rotating timetable similar to the instrumental music program. This course is for students who wish to commence or continue piano keyboard skills. All levels of ability are catered for, as the structure is based upon individual progress and is delivered in very small groups as part of our instrumental program. Students will also develop skills in performance, music literacy and aural training.





## VISUAL ARTS

### **Art: Discovering Art (09AAR)**

#### **(Not to be chosen by Extension Art students)**

Exploration of the man-made environment as an inspiration for creative activities in Art. Students use observation and imagination to express ideas through both traditional and innovative techniques selected from drawing, painting, printmaking and sculpture. Architecture, the urban environment, machines and manmade objects as well as the art of others, are used as a source for creative and original art works.

### **Craft (09ACR)**

Students investigate and explore man's environment to develop designs from the observation of textures, forms, shapes and patterns all around us. They will explore different cultural influences, various textile and printmaking techniques as well as interpreting ideas into ceramics and mixed media. A range of objects such as mirrors, mosaic wall decorations, ceramic pots, platters or candle holders, bags, cushions or wearables may be made.

### **Drawing (09ADW)**

Our man-made world is a wonderful theme around which the drawing student can gain great inspiration for exciting artworks.

Such subjects as architecture, machinery, musical instruments and interior spaces will provide students with opportunities to develop their skills of perspective, tonal shading, textural rendering and colour in a variety of individual ways.

This course enables students to combine their creative imaginations and new learned drawing skills to create artworks in such styles as Surrealism, Cubism and Science Fiction.



### **Film and Television (09AFT)**

Building on skills learned in Year 8, Film and Television helps students develop the knowledge and skills required to produce real life media projects and learn the tricks used by film and television producers to make an exciting program. The course puts the focus on film genre and the Hollywood style of film making. Students who have not studied Media in Year 8 are welcome to enrol.

## ENGLISH

In Year 9, students study the Western Australian English Curriculum, which is based on the three interrelated strands of Language, Literature and Literacy. The focus is on developing students' knowledge, understanding and skills in reading, writing, viewing, speaking and listening and students will do a range of analytical and creative tasks. Learning in English builds on concepts, skills and processes developed in earlier years, and teachers will revisit and strengthen these as needed. As part of this course, students will develop their functional and critical literacy skills.



Students engage with a range of texts including novels, short stories, poetry and film. In the mainstream programme, students complete eight common assessment tasks over the course of the year. This course has an oral component and at least one task is an oral presentation. Students also participate in a library reading programme and have access to an e-textbook to support the development of their English skills.

Where a student struggles to meet the demands of the mainstream English course, they may be placed in a Modified or Foundations class where they can receive additional support to meet their learning needs. Students in the Gifted and Talented programme will study a differentiated programme designed to extend and enrich their learning.

## ENGLISH AS AN ADDITIONAL LANGUAGE/DIALECT

English as an Additional Language/Dialect courses are designed to enhance the acquisition of standard Australian English for students who come from non-English speaking backgrounds.

The course uses the language modes of:

Listening

Speaking

Reading/Viewing

Writing

EALD covers a wide range of genres while focusing on the language needs of individual students. It supports language used in other subject areas and helps prepare students to succeed in academic study in senior school and in post school opportunities.

The course develops knowledge of vocabulary and English grammar, preparing for NAPLAN in Term 2. It examines cultural contexts and fosters cross-cultural understanding in the context of school subjects and everyday life, as well as encouraging the student's confidence in spoken English. The course seeks to prepare students to succeed in academic study.

All courses are flexible to cater for the individual needs of students. The maximum class size is 12, enabling individual attention. Eligible students intending to gain tertiary entry are greatly advantaged by participating in this course for at least Years 7, 8, and 9.

# HEALTH AND PHYSICAL EDUCATION

## Year 9 Health and Physical Education General

Health and Physical Education has two streams available to Year 9 students: General and Specialist Basketball.

This course of study involves two hours of physical activity and one hour of Health each week. It teaches students how to enhance health, safety, wellbeing and participation in physical activity in varied and changing contexts. The Health and Physical Education learning area is delivered in two key strands and a number of sub-strands.

Strand	Personal, Social & Community Health	Movement & Physical Activity
Sub Strands	<ul style="list-style-type: none"> <li>• <i>Being healthy, safe and active</i></li> <li>• <i>Communicating and interacting for health and wellbeing</i></li> <li>• <i>Contributing to healthy and active communities</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Moving our body</i></li> <li>• <i>Understanding movement</i></li> <li>• <i>Learning through movement</i></li> </ul>
Focus or Context areas	<b>Health</b>	<b>Physical Education</b>
<b>Parents, please note that pictorial, video and other media forms illustrating contemporary, real world scenarios will be used in the delivery of this curriculum especially in Health.</b>		



The contexts or focus areas that provide the breadth of learning may include:

<b>Health Education</b> <b>Provisional Grade awarded</b> <b>Semester 1</b> <b>Final Course Grade awarded Semester 2</b>	<b>Physical Education</b> <b>Provisional Grade awarded Semester</b> <b>1 Final Course Grade awarded</b> <b>Semester 2</b>
<b>Themed lessons related to:</b>	<p><b>The contexts for physical activities are:</b></p> <ul style="list-style-type: none"> <li>• Athletics</li> <li>• Athletics carnivals</li> <li>• Swimming carnivals</li> <li>• Fitness Testing</li> <li>• Basketball</li> <li>• Sofcrosse</li> <li>• Soccer</li> <li>• Cricket</li> <li>• TBall</li> <li>• Tennis</li> <li>• Badminton</li> <li>• Netball</li> <li>• Body &amp; Game Combat</li> <li>• Body Pump</li> <li>• Boxing</li> <li>• Speedball</li> <li>• Fitness Circuits</li> </ul> <p>These activities link to:</p> <ul style="list-style-type: none"> <li>• Challenge and adventure activities</li> <li>• Games and sports</li> <li>• Lifelong physical activities</li> <li>• Rhythmic and expressive activities</li> </ul>
<p><b>Sexual health</b></p> <ul style="list-style-type: none"> <li>• Actions and strategies to enhance health and wellbeing in a range of environments, such as: responding to emergency situations, identifying and managing risky situations and safe blood practices</li> <li>• Impact of external influences on the ability of adolescents to make healthy and safe choices relating to: sexuality, alcohol and other drug use, risk taking</li> </ul>	
<p><b>Managing risk</b></p> <ul style="list-style-type: none"> <li>• Actions and strategies to enhance health and wellbeing in a range of environments, such as: The use of complementary health practices to support and promote good health, responding to emergency situations, identifying and managing risky situations and safe blood practices</li> <li>• Skills to deal with challenging or unsafe situations</li> <li>• Strategies for managing emotional responses and resolving conflict in a family, social or online environment</li> </ul>	
<p><b>Community health</b></p> <ul style="list-style-type: none"> <li>• Factors that shape identities and adolescent health behaviour such as; cultural beliefs and practices, family, societal norms, stereotypes and expectations, the media and body image</li> <li>• Characteristics of respectful relationships such as, individuals, respect for personal differences and opinions empathy</li> <li>• The implications of attitudes and behaviours on individuals and the community, such as; prejudice, marginalisation, homophobia, discrimination</li> </ul>	
<p><b>Personal health</b></p> <ul style="list-style-type: none"> <li>• Actions and strategies to enhance health and wellbeing, such as: the use of complementary health practices to support and promote good health, responding to emergency situations, identifying and managing risky situations, safe blood practices</li> </ul>	

## Year 9 Specialist Basketball

The application and selection process requires prerequisites;

- a basketball skills and strategies assessment,
- the ability to maintain a high level of fitness matching WSHS Basketball standards, and
- an assessment of attitude and academic achievement.

The program has a strict code of behaviour and academic standard requirements. Students must fulfil these requirements each year or risk the chance of being withdrawn from the program. For those students not selected into the program at their first try, trials are conducted early each year for the following year. A prospectus for application can be obtained from the school website at

<https://www.willettonshs.wa.edu.au/our-curriculum/specialist-programs/specialist-basketball/>

## How are students assessed?

Students will be awarded multiple grades that encompass Health Education, Basketball Enrichment, Fitness and Basketball Specialist components of their offerings at the end of each year. Middle of the year grades are ONLY an indication of achievement at that time and NOT the final result. Health will not report on a provisional mid-year grade allocation.

## Subject Description

These students participate in all focus areas of the Health course and their practical Physical Education component is modified to reflect a significant amount of Basketball. They undertake four hours of Physical Activity predominately in a Basketball context and one hour of Health per week.

In Year 7 – 10, students will also be involved in a program to outline key concepts required to be successful as a Basketball athlete and beyond through the Basketball Enrichment program.

Health	Basketball	Physical Education
As per the Year 9 Health and Physical Education General course	<p><b>Focus areas:</b></p> <ul style="list-style-type: none"> <li>• Skills</li> <li>• Match play</li> <li>• Game Analysis</li> <li>• Player Analysis</li> <li>• Sport Psychology</li> <li>• Athlete Life Skills</li> <li>• Fitness Testing</li> <li>• Strength &amp; Conditioning</li> <li>• Injury Prevention</li> <li>• Injury Management</li> </ul>	<p><b>Themed sessions related to:</b></p> <ul style="list-style-type: none"> <li>• Athletics</li> <li>• Cross Training: Involves multiple sports</li> <li>• Athletics and Swimming carnivals</li> </ul>
These activities also link to the Australian & Western Australian Curriculums		<p>These activities also link to the Western Australian Curriculum</p> <ul style="list-style-type: none"> <li>• Challenge and adventure activities</li> <li>• Games and sports</li> <li>• Lifelong physical activities</li> <li>• Rhythmic and expressive activities</li> </ul>

## Electives

Health and Physical Education offer two electives in Year 9. Each of these courses run for a semester for two hours a week. They may require students to undertake a small theory component. Students will be awarded a final grade at the conclusion of each unit.

**Flexible Timetables:** All electives will offer some form of flexi-time to accommodate travel time. This will involve one of the following times: before school into session 1, recess into period 3, lunch into session 4 or session 5 into after school. These times are predetermined by where their selection sits in the overall timetable and students must be prepared to commit to these times. Strict rules will apply and students must consider the responsibilities that flexible timetabling may impose before selecting any of these courses.

## Racquet Sports (09HRQ)

A flexible timetable **MAY** exist for parts of this subject.

In this course students can extend their skills and the use of strategy in racquet sports.

The course extends skills already used in general physical education and the students' own activities.

The emphasis is on competitive play in order to challenge students and the skill development focuses on training to correct individual deficiencies to improve competitive performance. The contexts will come from a combination of squash, badminton, table tennis and tennis and will utilise both school and community facilities. This may require students to travel by school bus to venues. Racquets and consumables are provided.

## Outdoor Education (09HOE)

- *This course is not available to Specialist Basketball students.*
- A flexible timetable **MAY** exist for parts of this subject as listed above
- Students will require swimming ability to be able to swim 200m as a continuous swim in aquatic settings.

This course specifically set up to give students the basic concepts in preparation for the Year 10 Outdoor Education course. Students will develop their inter-personal and leadership skills as they participate in this highly practical course designed to develop outdoor recreational and survival skills.

Students will participate in a range of activities from some of the following pursuits:

- Team building
- Navigation
- Beach games and river activities
- Fishing
- Survival Skills
- Snorkelling
- Indoor rock climbing
- Roping
- Bush cooking



## HUMANITIES AND SOCIAL SCIENCES

The Humanities and Social Sciences Learning Area develops each student's understanding of how Individuals and groups live together and interact with their environment. Students are encouraged to develop a respect for cultural heritage and a commitment to social justice, the democratic process and ecological sustainability.

In Year 9, the focus in Term 1 is on developing knowledge and skills in geography by studying the geography of interconnections, food security and biomes, resource management and issues in Australian society as outlined in the Western Australian Geography Curriculum. Term 2 will be dedicated to the study of history from 1750 to 1901 CE as a requirement for the implementation of the Western Australian History Curriculum. The study emphasis in this curriculum will be on the Industrial Revolution and World War 1.

Term 3 will cover aspects of democratic processes, social justice and citizenship. The study of economics in Term 4 is delivered through a case study approach examining contemporary issues linked to the global economy, financial risks and rewards, competitive advantage and workplace contexts.



## Course Structure

### Term One

#### MODULE ONE

Biomes and Food Security (Geography and Earth and Environmental Sciences)  
Interconnections (Geography & Earth and Environmental Science)

### Term Two

#### MODULE TWO

The Making of the Modern World and Australia - Technology Progress and Social Change  
Industrial Revolution (Modern History)  
The Great War

### Term Three

#### MODULE THREE

Civics and Citizenship: Our democratic rights (Politics and Law)

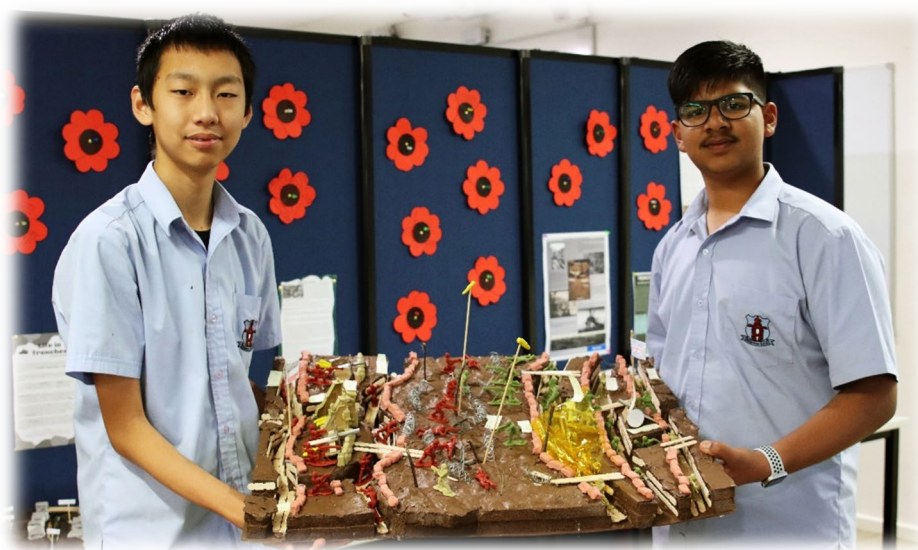
### Term Four

#### MODULE FOUR

Australia and the global economy (Economics and Business Studies)

A continued emphasis will be placed on the development of skills including research, Interpretation of source and data skills, mapping, graph construction, chronological sequencing, Document analysis, referencing and effective ethical use of the internet. Writing skills such as sentence construction and paragraphing are further developed as well as note taking and essay/report writing skills. Students will also be presented with opportunities to enter national competitions.

In Year 9 students study a common course with only the Gifted and Talented and the Modified programs differentiated for Semester 1 and 2.





## LANGUAGES

Languages is a compulsory subject. Students continue the language studied in Year 8. New students should select the language they have previously studied, or discuss their choice with the Head of Languages.

### **Italian (09LI)**

Students develop further their speaking, listening, reading and writing skills in Italian. Topics include special occasions, healthy lifestyles and eating and drinking.

### **French (09LF)**

Students develop further their speaking, reading, writing and listening skills as well as their engagement with French culture and society. Topics include special occasions in France, healthy lifestyles and the media.

### **Japanese (09LJ)**

Students develop further their communication skills through the use of the three Japanese writing systems. Topics include celebrations and going out, the mass media and anime and manga.



# MATHEMATICS

The Western Australian Year 9 curriculum is organised around the interaction of three content strands and four proficiency strands. The proficiency strands are:

- Understanding
- Fluency
- Problem Solving and
- Reasoning

These indicate the approach to exploring content and developing the thinking and doing of Mathematics. An area of emphasis is the language to build the developmental aspects of the learning of Mathematics. There are three content strands:

- Number and Algebra
- Measurement and Geometry
- Statistics and Probability

**Number and Algebra** are developed together as each enriches the study of the other. Students apply number sense and strategies for counting and representing numbers.

Students;

- explore the magnitude and properties of numbers
- apply a range of strategies for computation and understand the connections between operations
- recognise patterns and understand the concepts of variable and function
- build on their understanding of the number system to describe relationships and formulate generalisations
- recognise equivalence and solve equations and inequalities
- apply their number and algebra skills to conduct investigations, solve problems and communicate their reasoning.

**Measurement and Geometry** are presented together to emphasise their relationship to each other, enhancing their practical relevance. Students develop an increasingly sophisticated understanding of size, shape, relative position and movement of two-dimensional figures in the plane and three-dimensional objects in space. Students;

- investigate properties and apply their understanding of them to define, compare and construct figures and objects
- learn to develop geometric arguments
- make meaningful measurements of quantities, choosing appropriate metric units of measurement
- build an understanding of the connections between units and calculate derived measures such as area, speed and density.

**Statistics and Probability** initially develop in parallel and the curriculum then progressively builds the links between them. Students recognise and analyse data and draw inferences. Students;

- represent, summarise and interpret data and undertake purposeful investigations involving the collection and interpretation of data
- assess likelihood and assign probabilities using experimental and theoretical approaches
- develop an increasingly sophisticated ability to critically evaluate chance and data concepts and make reasoned judgments and decisions, as well as building skills to critically evaluate statistical information and develop intuitions about data.

Students progress at different rates in Year 8, and in Year 9 the Mathematics programs are expanded to cater for this. Students will be allocated to pathways based on their level of performance in Year 8 and on teachers' judgements of their mathematical development.

Students may have the opportunity to participate in the Australian Mathematics Competition (AMC) and the International Competitions and Assessments for Schools (ICAS).



## SCIENCE

An understanding of science is important to appreciate the world in which we live and to be able to contribute intelligently to scientific debate in the community. Students will experience science through a practical approach and in a variety of interesting contexts.

Students will study in the following areas:

- Biology: The science of ecology, and the biology of multicellular organisms' internal systems of life.
- Chemistry: Atomic structure and the energy transfer involved in chemical reactions, exploring its importance in both living and non-living systems.
- Physics: Energy transfer in the contexts of electricity and wave motion in sound and light.
- Earth and Space Science: The physical nature of the Earth including plate tectonics and volcanism.
- Science Inquiry: How to conduct investigations in a scientific and logical way.
- Science as a Human Endeavour: Exploration of the nature and development of science and its influence in our lives.

### Extension Science

Students in Year 8 Extension Science will usually continue to Year 9 Extension. Provided there are vacancies, as conducted in Years 7 and 8, new students will be selected to participate in the Year 9 Extension Science Program. Students in the extension course will study the common course as well as participating in BHP-Billiton, STAWA and other Science Competitions and undertaking an extended investigation.



## **TECHNOLOGIES**

### **Electives**

The Technologies learning area draws together the distinct but related subjects of Design Technologies and Digital Technologies.

Participation in Technologies will ensure that all students benefit from learning about and working with traditional, contemporary and emerging technologies that shape the world in which we live. The studying of Technologies provides new ways of thinking, collaborating and communicating for people of all ages and abilities. This learning area provides opportunities for students to apply practical skills and processes when using technologies and resources to create innovative solutions that meet current and future needs.

## **DESIGN TECHNOLOGIES**

### **Digital Graphics (09TDG)**

Prepare to be challenged by computer skills that accommodate creativity. This course gives the opportunity to learn and perfect techniques used by professional graphic designers and computer artists. Students will learn computer skills vital for optimising the appearance of school projects, minimising file size and have the opportunity to explore three aspects of graphic design. A sub unit in Adobe In Design will provide the opportunity to learn principles of layout and design relating to print publication. The students will work on the production of a look book. In Illustrator students will explore the potential for using effects and styles when creating vector graphics through development of comics.



### **Dimensional Design (09TDD)**

Dimensional Design explores the more complex Computer Aided Design (CAD). Students use Autodesk Inventor®, and Revit Architecture®, two industry standard software packages, as tools to design and refine three-dimensional models on the computer. They produce quality virtual models of their own designs and generate technical drawings and industrial presentations to high standards. Along with this, students also design their own products and send these to CNC machines (Laser Cutter and CNC Router) for manufacture.

The course provides students with solid background knowledge and skills for senior school courses in Design: Dimensional Design and Engineering Studies. It will also be beneficial for further study and careers in areas such as engineering, machining, drafting, design and building and construction.

### **Café Foods (09TCF)**

Eating out is becoming increasingly popular in today's society. "What to eat? When to eat? Where to Eat? What to drink?" are questions that come to mind. Café foods take the guesswork out of the café menu and its food products. Students will develop the skills to read a menu; learn techniques and skills to prepare café food products and present them with culinary flair!

This is a hands-on course with food created activities based on a café format, providing a practical approach to learning. The assessment tasks will allow opportunities for students to develop recipes for specific café dining situations. Fees for this course cover the costs of ingredients, work books and protective clothing.

### **Food Trends (09TFT)**

Trends in food come and go and it's sometimes difficult to be aware of the best ideas. This course will begin to explore the trends affecting food choices, the impact it has on food selection and preparation and health of the individual. Food Trends provides students with the opportunity to investigate these ever changing trends whilst continuing to develop their food preparation skills. The assessment tasks allow opportunities for students to develop their own recipes for specific trends. Fees for this course cover the costs of ingredients, work books and of protective clothing.



### **Metals Engineering (09TME)**

Students learn processes and develop skills in a variety of metalwork contexts. They use hand skills and machinery to make interesting models, using a variety of materials including brass, steel and Stainless steel. Students are encouraged to think for themselves and incorporate an amount of personal design into set project. Students also will be expected to develop skills using Autodesk Inventor to plan and design.

## **Photography (09TPH)**

### **Textiles (09TTT)**

In Textiles (09TTT) students design and produce active wear. In the process they explore industry knowledge and projects, materials in the fashion industry and ethical and sustainable practices. Students develop practical skills to design and construct their own textiles products such as hoodies, beanies and bags. Students will learn how to sew with knit fabric and independently select seams and hems to suit their knit fabric projects and design ideas. Year 9 textiles focuses on research development, customer profiling, fashion drawing, rapid concept development and exploring design details and components. Students will personalise products using embellishment techniques such as vinyl transfer and embroidery. Knit fabric for hoodie will be an additional cost.

### **Woodwork (09TWW)**

Woodwork expands on the knowledge gained in Year 8. Students will manufacture projects with simple mechanisms like gum ball machines. They will also develop box making skills with an emphasis on safe power tool usage and will continue to discover the properties of wood through interesting activities. They will investigate the technology process and use this to design their own projects. This subject continues to Year 11 and 12 where it is studied at both ATAR and General levels. It is relevant to the building trades, architecture and engineering as well as being used by workers in many fields and the home builder.

## **DIGITAL TECHNOLOGIES**

### **Computer Game Making (09TCG)**

Creating computer based games is a challenging context in which to grow programming skills. The GameMaker Studio program stages learning so new students are supported and experienced learners can extend their skill levels and interests. The subject begins using models of games provided by the teacher.

Students design games using the GameMaker Studio 2 and can progress to GameMaker Studio 2 which enables the design of challenging and sophisticated games. At the end of the program students have the opportunity to develop their own game based upon their understanding of programming and the skills they have learnt. At all stages there is guidance from the teacher.

### **Robotics 9 (09TROB)**

Creating computer based games is a challenging context in which to grow programming skills. The GameMaker program stages learning so new students are supported and experienced learners can extend their skill levels and interests. The subject begins using models of games provided by the teacher. Students design games using the GameMaker program and can progress to the design of challenging and sophisticated games. At the end of the program students have the opportunity to develop their own game based upon their level of skills developed. Early stages of the course there is regular teacher guidance and this tapers off as students develop their own expertise.

## Software Engineering (09TSE)

Year 9 Software Engineering focuses on developing an understanding of the fundamental principles of programming through the study of the Python programming language. First introduced to students in the Year 8 Digital Technologies unit, Python is a modern language used extensively across a large range of professions and industries including Computer Science, Engineering, scientific research, data analysis in the financial sector, Data Science as well as in Software and Database development and administration. Students with an interest in computer programming and problem solving will find the work challenging. There is a follow-on elective in year 10 for those who wish to develop their programming skills further. It is highly recommended for those considering studying Computer Science, Engineering and Sciences and Economics in Years 11 and 12.





## Course Costs Year 9

All course costs are given as a guide only. These are based on the 2022 pricing structures and are subject to change in 2023.

YEAR 9 - VOLUNTARY CONTRIBUTIONS	
English	\$26.00
Maths	\$28.00
Science	\$36.00
HaSS	\$26.00
H&PE	\$39.00
Languages	\$20.00
The Arts and Technologies	\$60.00
<b>Total Year 9 Course Available</b>	<b>\$235.00</b>

Students in Year 9 are required to select four (4) semester long electives. Students can select electives from Table A OR Table B. Electives listed in **Table A** are offered as part of the \$235 Year 9 Course of Study and therefore **DO NOT INCUR ADDITIONAL CHARGES**. Electives listed in **Table B** are deemed Extra and **DO INCUR ADDITIONAL COMPULSORY CHARGES**. Elective Costs vary each year. Families are encouraged to review prior to making subject selections.

TABLE A			
YEAR 9 ELECTIVES - NO ADDITIONAL COMULSORY CHARGE. ELECTIVE IS OFFERED AS PART OF THE \$235 COURSE OF STUDY			
LEARNING AREA	Course Name Lower School Fees	Course Code	COMPULSORY CHARGE
ART	Art	09AAR	Nil
ART	Dance	09ADA	Nil
ART	Film & Television	09AFT	Nil
TECH	Computer Game Making	09TCG	Nil
TECH	Dimensional Design (CAD)	09TDD	Nil
TECH	Digital Graphics	09TDG	Nil
TECH	Robotics	09TROB	Nil

## TABLE B

YEAR 9 ELECTIVES - INCUR COMULSORY CHARGES. THIS CHARGE IS IN ADDITION TO THE \$60 (\$15 per 4 elective) PROVIDED AS PART OF THE \$235 COURSE OF STUDY

LEARNING AREA	Course Name Lower School Fees	Course Code	COMPULSORY CHARGE
ART	Craft	09ACR	\$43.00
ART	Dance for Boys	09ADB	\$36.00
ART	Drama	09ADR	\$6.50
ART	Drawing	09ADW	\$35.50
ART	Music Extra	09AMEX	\$7.50
ART	Music 1	09AMU	\$8.50
ART	Music 2	09AMU	\$8.50
ART	Art: Extension	09AZ	\$95.00
PHYS ED	Outdoor Education	09HOE	\$107.00
PHYS ED	Basketball Studies Specialist	09HPZ	\$159.50
PHYS ED	Racquet Sport	09HRQ	\$74.50
TECH	Café Foods	09TCF	\$90.00
TECH	Electronics	09TEL	\$90.00
TECH	Food Trends	09TFT	\$90.00
TECH	Metals Engineering	09TME	\$45.00
TECH	Photography	09TPH	\$69.00
TECH	Software Engineering	09TSE	\$12.50
TECH	Textiles	09TTT	\$25.00
TECH	Woodwork	09TWW	\$54.00
TECH	Computer Science Specialist	09TZ	\$37.00
ART	Instrument - Piano Keyboard	INPK	\$16.50