BRISBANE STATE HIGH SCHOOL

Junior Course Guide

2025

Brisbane State High School Junior Course Guide

For students in Year 7 in 2025 (Year 12 in 2030)

Contents

View the most current list of State High's key staff contacts on the school website at https://brisbaneshs.eq.edu.au/our-school/contact-us

Motto

We believe that the pursuit of knowledge equips and enables our students to make a powerful diffe ence in the world.

ScientiaestPotestas
Knowledge is Power

Purpose

As a learning community, we are committed to developing young people to achieve their potential intellectually, personally and socially.

Intellectually, as:
- life-long, curious learners
- independent, creative thinkers.

Personally, as:
- resilient, balanced individuals
- confident, principled communicators

Socially, as:
- active, caring citizens
- enthusiastic, contributing team members.

Values

Learning: we love knowledge, learning and curiosity.
Excellence: we strive for world class standards and personal bests.
Respect: we earn respect for our integrity, humility and altruism.
Public education: we celebrate diversity as well as the things that bind us together.

Vision

Schooling at State High is a happy and inspiring experience—a time and a place where every young person develops intellectually, personally and socially. Every student experiences rigorous learning, significant personal growth and the spirit that comes from belonging to something bigger than themselves.

Together, teachers, students and parents/guardians leverage the strong traditions and history of the school to pursue and create a positive future. Our priorities come from a strong ethical base and deep sense of commitment to others and our society. We understand our place and responsibility as a leading educational community and the flagship of public education in Queensland

We are committed to working in partnership with our community as the natural place for students to explore their developing leadership and social commitment. At the same time, we look to prepare students to be successful across cultures and countries.

We are committed to personalising learning for each student to ensure that they maximise the opportunities this school provides. We all have a growth mindset. Our approach to teaching and learning is deliberate, backed by research and focused on unlocking the potential in each of us.

Introduction

Our Learning Policy shapes the planning, delivery and assessment of student learning at State High. It outlines our Pedagogical Framework, Dimensions of Learning, as well as the relevant processes and protocols, such as homework and assessment programs. The Policy also provides information pertaining to the management of issues which may arise during the teaching and learning cycle.

Brisbane State High School is all about ***learning***. We believe that all people can learn. Each individual has special qualities, interests and character to be developed. We provide learning experiences in all aspects of life. Young people will experience learning that is rigorous, future-focused, enterprising and transferable to the range of situations they will encounter. We believe that young people learn best when they have structure as well as space and time to foster creativity – time to think and grow. This teaching comes to life through excellent relationships between learner and teacher. We think that learning should be inspirational, challenging and fun.

We are committed to personal ***excellence*** and expect each person to strive for their best and consistently work hard. We believe in setting high standards and providing quality support to help people reach those standards and experience success. The school provides an extensive range of high quality opportunities and experiences so our students maximise their potential. Excellence for students and teachers means they take charge of their own learning, work collaboratively and engage in robust feedback to remain at the cutting edge of their studies/ profession.

Teaching, Learning and Curriculum Principles

Our shared vision for Teaching, Learning, Curriculum and Assessment at State High is informed by these common principles:

1. Everyone can learn at high levels.
2. Every lesson counts.
3. Diffe ent people learn in diffe ent ways.
4. Productive Habits of Mind can be taught and learnt.
5. Students and teachers aspire to the highest academic standards.
6. Students and teachers are creative and dynamic users of technology.

Classrooms at State High are characterised by:

1. Energy, enthusiasm and a love of learning.
2. Productive and supportive relationships between students and teachers.
3. A variety of learning modes.
4. Structured opportunities for students to think both independently and interdependently.
5. Students persisting with complex problems and striving for accuracy.
6. Higher-order thinking.

Curriculum at State High is characterised by:

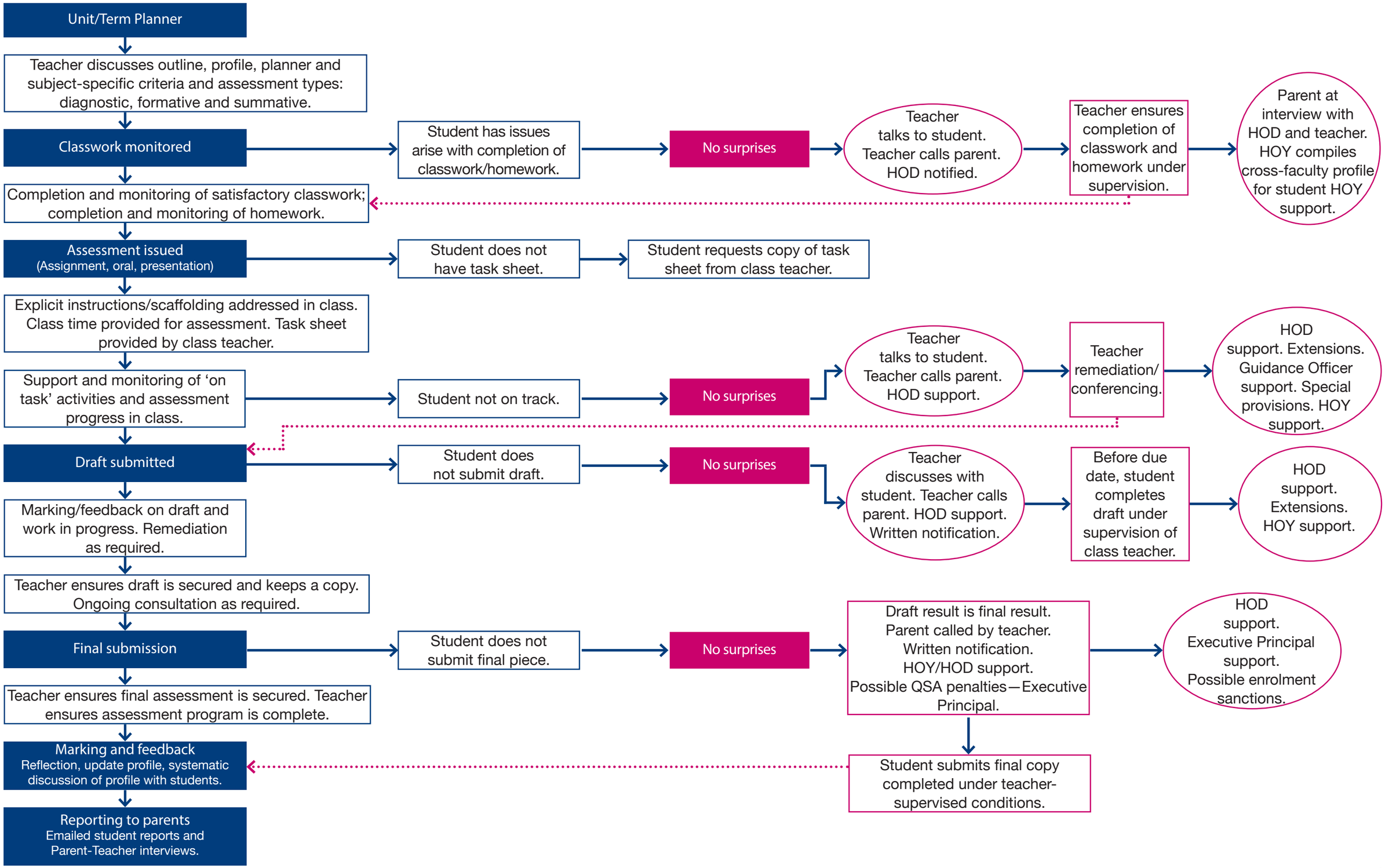
1. Regular opportunities for students to excel.
2. An appropriate degree of challenge and complexity.
3. A developmental approach to thinking and practical skills, processes and conceptual understanding.
4. Strong emphasis on deep understanding and an ability to apply understanding to unfamiliar situations.
5. Discerning and ethical use of technology to locate, filter and use information, collaborate with others and design innovative solutions and products.
6. Explicit teaching of the required literacy and numeracy skills.
7. Clear connections to the world beyond the school.

Assessment at State High:

1. Is measured against clearly-stated criteria.
2. Is supported by appropriate preparation activities and support materials.
3. Requires students to problem-solve, analyse, synthesise and evaluate, in addition to locating, classifying or recalling information.
4. Provides sufficient opportunities for every student to achieve to the potential.
5. Is followed by time for students to reflect on their lea ning and to receive feedback on their progress.
6. Is academically honest.

Flowchart for work completion

This flowchart for work completion provides an outline of the processes relevant to our Teaching, Learning and Curriculum Principles.



The State High Curriculum

Brisbane State High School offers a diverse range of subjects that can be studied in Year 7 to 12. This is in part a function of our size, but also a product of our commitment to meeting the learning needs of a diverse student population with diffe ent strengths, areas of interest and future aspirations.

The foundations of the school's academic curriculum which guide the teaching and learning at State High include:

- Teaching, Learning and Curriculum – Statement of Principles
- A common pedagogical framework centred on 'Dimensions of Learning'
- The use of ICTs to support and enhance student understanding
- The development of students' multi-literacies
- Higher-order thinking and problem-solving

In summary, we aim to create a curriculum structure that balances both student choice and our commitment to producing well-rounded individuals who participate effectively in b oader society as young adults.

Structure of the school day — Junior School

- Six subjects are studied in any one semester.
- Each Compulsory subject is timetabled for three 70 minute lessons each week with Electives timetabled for three times per week, for one semester of a year. Please refer to the Overview: Curriculum Progressions for more information.
- Students also complete one lesson per week of the ARC (Academic, Resilience and Careers) program.

Learning Areas

There are eight Learning Areas around which our Junior School Curriculum is structured, based on the Australian National Curriculum:

1. Business, Innovation & Design
2. English
3. Health and Physical Education
4. Humanities
5. Languages
6. Mathematics
7. Science
8. The Arts

Selecting subjects

Students' time in Junior School affo ds them the opportunity to sample some subjects to see if they enjoy them and if further study of these subjects is possible or desirable in future years. In order to maximise students' performance and enable them to reach their goals, students should study the subjects in which they are interested and excel. It is ideal for students to keep their options open by taking subjects that might be useful in preparing for Senior Schooling, or where there is a clear, logical progression, such as studying a language to Year 12.

In some Learning Areas, there are options available for students so that they can experience a broader range of disciplines before making informed selections of courses for study in Senior School. At the same time, students may find it beneficial to continue their study of courses, such as a Language, from primary school. Every effort will be made to ensure that student preferences are accommodated, subject to student/class numbers and timetable constraints.

Selecting semester units

Twelve units of study must be selected for the year (six per semester).

Year 7 and 8

The following subjects must be studied for two semesters in both Year 7 and 8:

- English or Aspire English
- Humanities or Aspire Humanities
- Mathematics or Aspire Mathematics
- Science or Aspire Science

N.B. There will be a separate process to select students for the Aspire Programs.

In Year 7 and 8, students may apply to study more than one Aspire Program: Aspire English/Humanities and/or Aspire Mathematics/Science. Please note that this is a two-year commitment.

Students will study subjects from the following Learning Areas for one semester in both Year 7 and 8:

- Health and Physical Education
- Languages — options available
- Business, Innovation & Design — options available
- The Arts — options available

Core subjects	Semester checklist
English or Aspire English Humanities or Aspire Humanities Mathematics or Aspire Mathematics Science or Aspire Science Health and Physical Education (one semester) Language (one semester) — Chinese, French, German, Italian, Japanese or Spanish	The Arts (choose one from the following) • Music • Dance • Drama • Visual Art • Media Arts Business, Innovation & Design (choose one from the following) • Design • Engineering • Digital Solutions

Year 9

The following subjects must be studied for two semesters in Year 9:

- English or English Extension
- Humanities
- Mathematics or Mathematics Extension
- Science

Students will study subjects from the following Learning Area for one semester in Year 9: Languages — Chinese, French, German, Italian, Japanese or Spanish

For one semester, students will continue to study the language that was studied in Year 8. Students who intend to study the language in Year 10 must choose a second semester of this subject. This additional semester of the language will count as one of the three electives.

All students will select three additional subjects to study from the following Learning Areas:

- Business, Innovation & Design
- Health and Physical Education
- Humanities
- Languages – Unit 2 of language studied in Semester 1
- Science
- The Arts

Core subjects

Two semesters

English or English Extension
Humanities
Mathematics or Mathematics Extension
Science

One semester (choose from one of the following)

- Chinese
- French
- German
- Italian
- Japanese
- Spanish

Semester electives

Languages

If students wish to study a language in Year 10, they must choose it for an additional semester. This will count as one of their electives.

Choose three from the following

- Dance
- Design
- Digital Solutions
- Drama
- Engineering
- Entrepreneurial Business
- Health and Physical Education
- Media Arts
- Music or Music Extension
- Philosophy
- Psychology
- Visual Art

To select English Extension and or Maths Extension for Year 9, students in Year 8 must achieve a minimum B standard and demonstrate a satisfactory grade for effort, behaviour, and homework. If eligible, a student may elect to conditionally enrol in English Extension and or Mathematics Extension. Places will be confirmed in line with eligibility criteria at the end of year reporting period.

How should students select subjects?

Selecting subjects should be based on consideration of the following points:

- Enjoyment
- Interest
- Previous successes/experiences
- Possible future pathways, if already known

A student SHOULD NOT choose subjects for the following reasons:

1. **'My friend is taking that subject.'** There are usually several classes in a subject, so even if you are doing the same subjects, you won't necessarily be in the same class.
2. **'I do/don't really like the teacher.'** There is no guarantee that you will have any particular teacher.
3. **'Someone told me that the subject is fun (or easy, or interesting).'** It may be enjoyable/easy/interesting for someone but not necessarily for you. Make up your own mind based on what you enjoy.
4. **'Someone told me that the subject is boring.'** See point 3.
5. **'Someone told me that I do/don't need that subject for the course I want to take in Year 12/at university.'** If you are planning this far ahead, speak with the relevant Head of Department, check tertiary prerequisites or see a Guidance Offic .

Supporting Quality Subject Decisions

KEY

This section describes school subject selection events.

This section describes what you need to do before moving to the next step.

JUNIOR START

Reflect and Set Goals

Year 8, ARC

Students reflect on their learning goals and evidence of learning to prepare them to make informed subject selections.

Engage and explore Junior Course Guide

Year 8, Weeks 2 to 4, Term 3, ARC

Students and parents/guardians explore information in the Junior Course Guide to understand what subjects are about.
Four questions for exploring:

1. What are you good at?
2. What do you like?
3. What are the three electives and pathway you are considering?
4. If I want to choose an extension subject, do I meet the prerequisites for English Extension or Mathematics Extension?

Students consider the learning in subjects using four guiding questions:

1. Why would I select this course/subject?
2. What does learning in this course/subject look like?
3. What aspects of this course/subject support me to stretch and challenge myself, and what aspects of this course/subject align to my strengths, skills and interests?
4. What Senior subjects can this course/subject lead me toward?

Bring reflections and questions to the Curriculum Showcase.

Attend the Year 8 into 9 Curriculum Showcase with your parents/guardians

Year 8, Week 4 Term 3

Students and parents/ guardians discuss information presented to finalise subject selections and check readiness criteria.

Submit Subject Selections

Year 8, Week 6, Term 3

Students and parents/ guardians reflect on choices made and seek to confirm them now that commitment has been made.

Goal setting and subject reflection

Year 8, Week 1, Term 4 ARC

Students reflect on their subject choices (in light of Term 3 results) and how this prompts them to refine their goals and seek feedback.

Parent/teacher/ student interviews

Year 8, Week 2, Term 4

Act on feedback for continued learning and improvement.

Study Year 9 preparatory course in promoted timetable

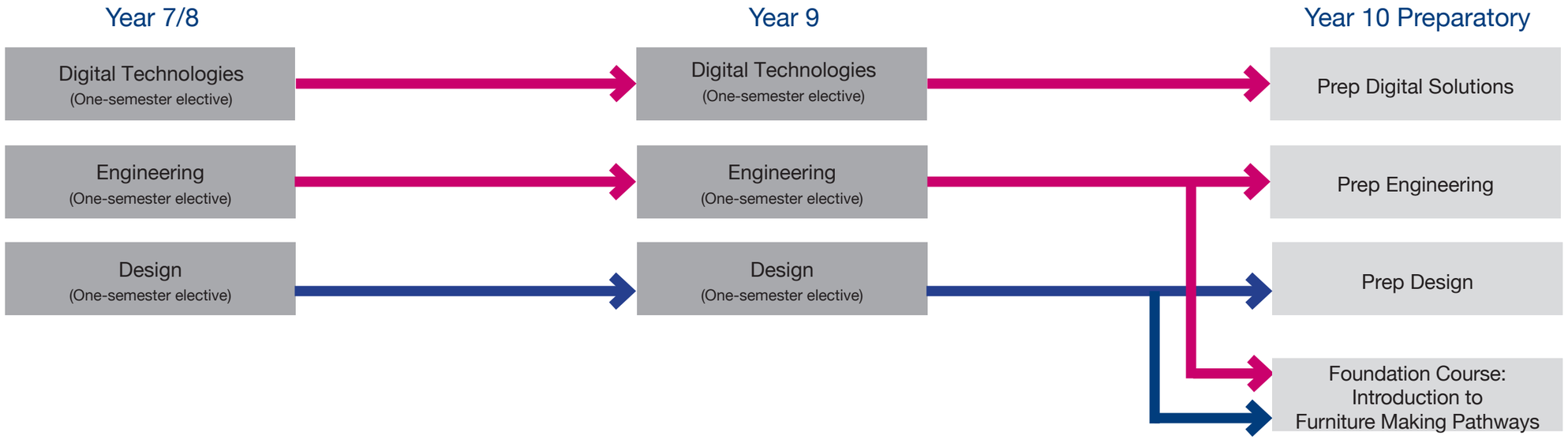
Year 8, Week 9 and 10, Term 4

Reflect and Set Goals

Year 9, Term 1, ARC

Business, Innovation & Design

Learning area: Business, Innovation & Design



Design (Year 7)

Purpose

In Design, students engage in a design process and design thinking.

The design process the students follow allows them to generate and develop ideas and critically evaluate them against design criteria. Students must make ethical decisions and consider aesthetics, functionality, sustainability and the suitability of materials to ensure their ideas meet the requirements of the client or design problem. Students will communicate ideas through the use of sketching, low fidelity and rapid digital prototyping. They use a mixture of all three of these processes to articulate their ideas to the clients in the form of a pitch or visual presentation.

Unit description

Sketching fundamentals

This is a formative assessment item that allows students to explore and develop their design sketching. This will provide students with the skills and knowledge to articulate their thinking and decision-making effectively on paper. Following a well-developed process that is relevant throughout the Design syllabus, this will develop their understanding and skill of multi-angle perspective skills as well as representations skills across multiple mediums.

Design Challenge

The focus of this assessment is on students creating better design solutions to society's most complicated problems under exam conditions. We support innovators and entrepreneurs to design products, services and environments with real social impact. Students will focus on the develop phase of the design process through brainstorming, sketching and evaluating.

Snap-it

The Snap-it design folio allows students to explore and engage with the needs and wants of five-yea - old children and their anthropometrics. This allows them to develop and design a camera specificall tailored for children and their ergonomics. Engaging and empathising with the client to ensure their needs and wants are met is an essential tool of Design. This unit builds on skills and processes introduced in the previous unit which will build success in cross-curricular applications. Students will engage with the full design process throughout this unit which includes both the exploring and developing phases.

Key skills:

- Developing critical and creative thinking strategies
- Analytical thinking
- Utilise a range of sketching, software and prototyping skills
- Understanding and empathise with clients' needs and wants to develop possible solutions
- Solving real-world problems
- Analysing systems and products using a range of design thinking tools
- Collaborating with clients and fellow Design students to develop effective communication via oral, written and sketch methods
- Low-fidelity p ototyping
- Using a range of techniques to generate, communicate and present ideas
- Evaluating design solutions against design criteria and providing recommendations to improve proposals
- Justifying design decisions to suit each user's needs

Assessment overview

The Year 7 Design assessment includes an examination and a portfolio.

Pathways

The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 8 and then Year 9 Design.

Design (Year 8)

Purpose

In Design, students engage in a design process and design thinking.

The design process the students follow allows them to generate and develop ideas and critically evaluate them against design criteria. Students must make ethical decisions and consider aesthetics, functionality, sustainability and the suitability of materials to ensure their ideas meet the requirements of the client or design problem. Students will communicate ideas through the use of sketching, low fidelity and rapid digital prototyping. They use a mixture of all three of these processes to articulate their ideas to the clients in the form of a pitch or visual presentation.

Unit Descriptions

Sketching fundamentals

This is a formative assessment item which allows students to explore and develop their design sketching. This will provide students with the skills and knowledge to articulate their thinking and decision-making effectively on paper. Following a well-developed process that is relevant throughout the Design syllabus, this will develop their understanding and skill of multi angle perspective skills as well as representations skills across multiple mediums.

Light-it

The focus with this folio assignment is to understand the needs and wants of the demographic group to ensure the end design is desirable for the intended user. The objective of this introduction to the design process is to allow the students to explore and develop ideas through sketching and prototyping.

Room-it

The Room-it design folio allows students to explore and engage with a real client scenario. The fundamentals of Room-it is that the designer considers the client's needs and wants as a higher priority than other influences throughout the design process. This unit builds on skills and processes introduced in the previous unit which will build success in cross-curricular applications. Students will engage with the full design process throughout this unit which includes both the exploring and developing phases. Every student designs an individual solution to ensure that the final proposal effectively answers the design brief. As the name Room-it suggests, the design problem is to design an interior space with imagination and creativity as a priority.

Key skills

- Developing critical and creative thinking strategies
- Analytical thinking
- Utilise a range of sketching, software and prototyping skills
- Understanding and empathise with clients' needs and wants to develop possible solutions
- Solving real-world problems
- Analysing systems and products using a range of design thinking tools
- Collaborating with clients and fellow design students to develop effective communication via oral, written and sketch methods
- Low-fidelity p ototyping
- Using a range of techniques to generate, communicate and present ideas
- Evaluating design solutions against design criteria and providing recommendations to improve proposals
- Justifying design decisions to suit each user's needs

Assessment overview

The Year 8 Design assessment includes a Body of Work and Design Portfolios.

Pathways

The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 9 Design.

Design (Year 9)

Purpose

In Design, students engage in a design process and design thinking.

The design process the students follow allows them to generate and develop ideas and critically evaluate them against design criteria. Students must make ethical decisions and consider aesthetics, functionality, sustainability and the suitability of materials to ensure their ideas meet the requirements of the client or design problem. Students will communicate ideas through the use of sketching, low fidelity and rapid digital prototyping. They use a mixture of all three of these processes to articulate their ideas to the clients in the form of a pitch or visual presentation.

Unit Descriptions

Design Challenge

The focus of this assessment is on students creating better design solutions to society's most complicated problems under exam conditions. We support innovators and entrepreneurs to design products, services and environments with real social impact. Students will focus on the develop phase of the design process through brainstorming, sketching and evaluating.

Reuse-it

The focus with this assignment is to design an industrial product, specifically for use in a given scenario. The focus for the assessment is to work through all stages of the Design Process to develop and prototype a product(s) that is centred around environmental sustainability and suitability for the client. Throughout this unit, students will experience opportunities to analyse, explore and develop ideas through sketching and prototyping to evaluate and refine their ideas. Students will evidence the relevant stages of the design process through the production of a design folio.

Key Skills

- Developing critical and creative thinking strategies
- Analytical thinking
- Utilise a range of sketching, software and prototyping skills
- Understanding and empathise with clients' needs and wants to develop possible solutions
- Solving real-world problems
- Analysing systems and products using a range of design thinking tools
- Collaborating with clients and fellow Design students to develop effective communication via oral, written and sketch methods
- Low-fidelity p ototyping
- Using a range of techniques to generate, communicate and present ideas
- Evaluating design solutions against design criteria and providing recommendations to improve proposals
- Justifying design decisions to suit each user's needs
- Planning of time and resources to complete project work

Assessment overview

The Year 9 Design assessment includes portfolios and an examination.

Pathways

The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 10 Design.

Digital Technologies (Year 7)

Purpose

Digital Technologies across Year 7 to 9 aims to develop an understanding of design, systems and computational thinking skills across a variety of contexts and programming languages. Digital Solutions is a problem-based curriculum that requires students to deconstruct complex problems, develop abstractions to make information manageable, identify patterns, organise data and write algorithms.

In Year 7, students will develop a keen understanding of hardware, software, data storage and networks, as well as the fundamentals of algorithms including sequence, selection and iteration.

Unit description (deep understanding)

Unit 1: Computer Systems

This introductory unit answers the question – "What are computers and how do they work?" In this unit, students examine the hardware and software that allows data to be inputted, stored and transferred. Students will also develop an understanding of networks and how the internet works.

Unit 2: Algorithm Design and Computer Programming

In the second unit, students focus on designing algorithms to solve problems, representing them diagrammatically and in Swift (Swift is the language created by Apple to program apps). Using Swift Playgrounds, students begin their high school coding journey by learning how to program commands, functions and loops. Through problem-solving, they develop their debugging and troubleshooting skills.

Unit 3: Data Analysis

Introduces Data, Information, Data Types, Storage and Databases. Students explore a range of online information systems to acquire, analyse, validate, and evaluate various types of data. They apply techniques to collect their own data and use formulas and functions to turn data into information.

Unit 4: Algorithm Design and Computer Programming

Students focus on designing algorithms to solve problems, representing them diagrammatically and in Swift – the language created by Apple to build apps. Using Swift Playgrounds, students begin their high school coding journey by learning how to program commands, functions and loops. Through problem-solving, they develop their debugging and troubleshooting skills.

Key skills

Students will be engaged in the following digital technology skills throughout the Year 7 course.

- Distinguishing between different types of networks and defined purposes
- Explaining how text, image and audio data can be represented in digital systems
- Analysing and evaluating data from a range of sources to model and create solutions using spreadsheets
- Designing, testing and modifying algorithms incorporating branching and iterations focuses
- Planning, managing and documenting digital projects

Assessment overview

The Year 7 assessment program includes a supervised written assessment and digital assignments. .

Pathways

Students may progress from Year 7 Digital Technologies to Year 8 Digital Technologies. The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 8, but are not an essential prerequisite for the Year 8 course. Beyond Year 8, the usual progression would be the study of Digital Solutions in Year 9 to 12, assuming readiness criteria are met.

Digital Technologies (Year 8)

Purpose

Digital Technologies in Year 8 develops the three underpinning thinking skills of the Digital Curriculum (computational, design and systems thinking) and allows for deeper deconstruction of complex problems. Students create solutions that meet the identified needs of the end user. There is a strong focus on design and systems thinking as students create solutions with functional user interfaces.

In Year 8, students also move from General Purpose Programming Languages to Object Orientated Languages. This transition develops an understanding of object inheritance which is useful in more complex programming solutions.

Unit description (deep understanding)

Unit 1: Robotics (Lego Spike Prime)

In the first Year 8 unit, students are introduced to robotics using Lego Spike Prime kits in combination with their iPads. This unit builds on students' prior coding knowledge, encouraging them to develop and plan algorithms through the use of pseudocode. Students are guided through the fundamentals of coding logic, sensors, and control structures before applying this understanding to solve real-world problems. The final assessment challenges students to create and document robotic solutions for a variety of practical scenarios, with a focus on adaptability and purposeful design.

Unit 2: App Development (Swift)

In the second unit, students explore app development using Swift – Apple's programming language for iPad and iOS. They are introduced to key principles of user interface design, app architecture, and functionality as they begin constructing their own multi-screen applications. The unit builds student understanding of event-driven programming and the object-oriented concepts embedded in Swift. By the end of the term, students design and present a portfolio app that reflects their learning and design capabilities, showcasing a personalised, interactive user experience.

Key skills

Students will be engaged in the following digital technology skills throughout the Year 8 course.

- Defining and decomposing problems in terms of functional requirements and constraints
- Designing user experiences and algorithms incorporating branching and iterations, and test, modify and implement digital solutions
- Evaluating their solutions in terms of meeting needs, innovation and sustainability
- Planning and managing digital projects

Assessment overview

The Year 8 assessment program includes two extended Digital Assignments.

Pathways

Students may progress from Year 8 Digital Technologies to Year 9 Digital Technologies. The knowledge and skills developed as a result of the study of the Year 8 course will prepare students for further development in Year 9, but are not an essential prerequisite for the Year 9 course. The usual progression would then be the study of Digital Solutions in Year 10 to 12, if readiness criteria are met.

Digital Technologies (Year 9)

Purpose

In Year 9, students will engage in one of the most widely used scripting languages — Python. Python is a high-level, interpreted, general-purpose programming language. Its design philosophy emphasises code readability with the use of significant indentation. Python is a computer programming language often used to build websites and software, automate tasks, and conduct data analysis. Python is a general- purpose language, meaning it can be used to create a variety of different programs and isn't specialised for any specific problems. Python is used in applications from creative web applications to data analysis in industries from science to finance to technology.

Across the semester, students will refine their knowledge of systems, design and computational thinking. In particular, students will develop their abstraction and algorithmic thinking skills as they carefully create a user-centric interactive experience.

Unit description (deep understanding)

Unit 1: Python in Minecraft

Students learn to write code in Python while helping the fictional CodingMine software development company. This mini-course teaches the absolute basics of Python and takes students from knowing no syntax to defining functions and creating their own mini-game in Python.

Unit 2: Python in the Real World

This unit builds on students' foundational Python skills while encouraging them to examine the social and ethical impacts of technology in modern society. Using a web-based code editor and professional tools such as Microsoft Visual Studio Code, students deepen their understanding of Python through real-world problem-solving tasks. They will explore and discuss critical social and ethical considerations, applying this knowledge as they design and develop an interactive text-based adventure game. Throughout the unit, students will follow a structured problem-solving process to investigate, develop, generate, and evaluate solutions that meet specific user requirements.

Unit 3: Database

In this unit, students are introduced to core concepts of database design and management, laying a strong foundation for further study in senior Digital Solutions. Students will explore key topics including flat-file versus relational databases, data types (text and numerical), correct data input methods, storage and retrieval of database files, and data querying to uncover trends and patterns. Through practical, business-focused scenarios – such as identifying key customers, forecasting sales, and analysing seasonal trends – students will develop their skills in using data to inform decision-making. Stimulus materials and structured activities will guide students as they apply these concepts in a meaningful context.

Key skills

Students will be engaged in the following digital technology skills throughout the Year 9 course.

- Defining and deconstructing real-world problems with a user-centric approach
- Investigating the impacts of technology on society
- Designing user experiences by evaluating alternative designs against criteria including functionality, accessibility, usability and aesthetics
- Evaluating solutions in terms of meeting needs, innovation and sustainability and potential for innovation and enterprise
- Planning and managing digital projects

Assessment overview

The Year 9 assessment program includes a formative project task (Unit 1), a game specification plan and built game (Unit 2) and a project (Unit 3).

Pathways

Students will progress from Year 9 Digital Technologies to Year 10 Preparation Digital Solutions. The knowledge and skills developed as a result of the study of this course, will prepare students for further development in Year 10. The usual progression would then be the study of Digital Solutions in Year 11 and 12.

Engineering (Year 7)

Purpose

Year 7 Engineering builds on lateral, creative solutions to develop enterprising and innovative individuals with the ability to make discerning decisions concerning the development, use and impact of technologies. A variety of delivery mediums will be utilised in order to create an environment where engineering problem-solving process involves the practical application of science, technology, engineering and mathematics (STEM) knowledge for students to work independently and collaboratively to solve complex, open-ended problems.

The Australian Curriculum: Design and Technologies – Engineering principles and systems are focused on developing understanding around introductory principles in mechanics and technology application. Students will be able to recognise, describe and solve problems, using engineering fundamentals.

Course Outline

Students in Year 7 Engineering will develop and apply fundamental understanding of engineering design principles through investigating, generating, producing, evaluating, collaborating and managing a range of design problems within Robotics and Mechanics.

Unit description (deep understanding)

Engineering Mechanics

This unit introduces students to the fundamental principles of engineering mechanics. Students will explore concepts such as Newton's laws of motion, force, mass, and matter through engaging contexts, including flight and the mechanics of launching or lifting objects. They will learn how to identify and describe engineering problems using scientific principles and apply these to design-based solutions.

Robotics

This unit introduces students to the application of robotics to solve real-world problems, with a focus on sustainability and innovation. Students will explore the use of autonomous systems in reforestation efforts, such as planting trees using drones or automated vehicles, as well as challenges related to flight and aerial navigation. Through hands-on projects, students will develop skills in creative programming, problem-solving, communication, and teamwork.

Key skills

- Symbolise and explain ideas and solutions
- Analyse problems and information
- Use design and systems thinking to generate design ideas and communicate these to a range of audiences
- Generate prototype solutions that assess the accuracy of predictions
- Evaluate and refine ideas and solutions to make justified recommendations
- Make decisions about and use mode-appropriate features, language and conventions to communicate development of problem solutions

Assessment overview

Year 7 Engineering assessment includes project folios.

Pathways

The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 8 and then Year 9 Engineering.

Engineering (Year 8)

Purpose

Year 8 Engineering builds on lateral, creative solutions to develop enterprising and innovative individuals with the ability to make discerning decisions concerning the development, use and impact of technologies. A variety of delivery mediums will be utilised in order to create an environment where engineering problem- solving process involves the practical application of science, technology, engineering and mathematics (STEM) knowledge for students to work independently and collaboratively to solve complex, open-ended problems.

The Australian Curriculum: Design and Technologies – Engineering principles and systems are focused on developing understanding around introductory principles in mechanics and technology application. Students will be able to recognise, describe and solve problems, using engineering fundamentals.

Course outline

Students in Year 8 Engineering will develop and apply a fundamental understanding of engineering design principles through investigating, generating, producing, evaluating, collaborating and managing a range of design problems within the Engineering Fundamentals.

Unit description (deep understanding)

Engineering Fundamentals

This unit introduces students to fundamental principles around engineering mechanics. Students will develop skills and understanding of Newton's laws of motion and, potential and kinetic energy. Application of these energy concepts then assists to provide a framework creating key components of a design and build project.

Key skills

- Engineering principles (machine)
- Explain ideas and solutions through written and graphical communication methods
- Analyse problems and information
- Use design and systems thinking to generate design ideas and communicate these to a range of audiences
- Generate prototype solutions that assess the accuracy of predictions
- Evaluate, test and refine ideas to make improvements upon original design concepts providing justified recommendations
- Make decisions about and use mode-appropriate features, language and conventions to communicate the development of design concepts and problem solutions

Assessment overview

Year 8 Engineering assessment includes project folios.

Pathways

Students will progress from Year 8 Engineering into Year 9 Engineering. The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 9.

Engineering (Year 9)

Purpose

Year 9 Engineering builds on lateral, creative solutions to develop enterprising and innovative individuals with the ability to make discerning decisions concerning the development, use and impact of technologies. A variety of delivery mediums will be utilised in order to create an environment where engineering problem- solving process involves the practical application of science, technology, engineering and mathematics (STEM) knowledge for students to work independently and collaboratively to solve complex, open-ended problems.

The Australian Curriculum: Design and Technologies – Engineering principles and systems are focused on developing understanding around introductory principles in materials and technology application. Students will be able to recognise, describe and solve problems, using engineering fundamentals.

Course Outline

Students in Year 9 Engineering will develop and apply a fundamental understanding of engineering design principles through investigating, generating, producing, evaluating, collaborating and managing a range of design problems within emerging materials and programmable devices.

Unit description (deep understanding)

Emerging Technologies

This unit will focus on emerging technologies in 3D modelling and prototyping, utilising Autodesk software. This unit will include the essential skills required by young engineers to visually communicate their problem-solving and design process.

Programmable Devices

This unit allows students to develop foundation knowledge of control systems using programming skills to be applied in real-world scenarios.

Key skills

- Engineering principles (structural, civil, control)
- Symbolise and explain ideas and solutions
- Analyse problems and information
- Use design and systems thinking to generate design ideas and communicate these to a range of audiences
- Generate prototype solutions that assess the accuracy of predictions
- Evaluate and refine ideas and solutions to make justified recommendations
- Make decisions about and use mode-appropriate features, language and conventions to communicate development of problem solutions

Assessment overview

Year 9 Engineering assessment includes a project folio and an exam.

Pathways

Students will progress from Year 9 Engineering into Year 10 Engineering. The knowledge and skills developed as a result of the study of this course, will prepare students for further development in Year 10.

Entrepreneurial Business (Year 9)

Purpose

Entrepreneurial Business provides students with a variety of future opportunities enabling a competitive advantage in entrepreneurship across all facets of business, exclusive to business, legal and accounting in many types of industries, both locally and internationally.

Australia needs enterprising individuals who can make informed decisions and actively participate in society and the economy as individuals and, more broadly, as global citizens. Students will encounter real-life experiences that address topical issues in relation to legal aspects, business management and accounting practices. It is critical that students are equipped with the knowledge, understanding and skills that will empower them in the face of real-world challenges. Entrepreneurial Business inspires students to shape their entrepreneurial skills that contribute to the development of Australian and global societies.

The study of Entrepreneurial Business develops the knowledge, understanding and skills that will equip students within the business environment with traits such as effective communication, presentation skills, collaboration, teamwork, becoming responsible citizens and creative thinking specific to developing an entrepreneurial idea.

Through authentic learning opportunities, the Entrepreneurial Business curriculum fosters enterprising individuals who are able to effectively embrace change; innovate; work with others; show initiative, flexibility and leadership; plan, organise and manage risk; and use resources efficiently. Entrepreneurial Business will better place students now and in their adult lives to actively and effectively participate in entrepreneurial activities, while reflecting on the effects of their decisions now and in the future.

Entrepreneurial Business provides students with opportunities to develop enterprising behaviours and capabilities that will equip them to face 21st century challenges and create opportunities for their lifetime learning.

Unit description (deep understanding)

Business Functions

- Marketing
- Operations
- Finance
- Human resources

Legal and Regulatory Requirements

- Business registration
- Intellectual property
- Insurance

Accounting

- Sources of finance
- Budgeting
- Critical thinking like an accountant through forensic accounting cases

Key skills

Students will be able to:

1. Define and decompose real-world problems
2. Document the tasks that need to be done, their order and the resources that are needed to be used to create solutions
3. Identify and locate relevant sources, using ICT and other methods
4. Process and synthesise information from a range of sources for use as evidence in an entrepreneurial context
5. Develop a product proposal of an entrepreneurial idea using evidence from a range of sources that are referenced
6. Select and use a range of communication media (oral, graphic, written) and digital technologies to create a persuasive pitch
7. Apply accounting skills to create a personal budget
8. Outline the regulatory requirements needed in business

Assessment overview

The Year 9 assessment program includes:

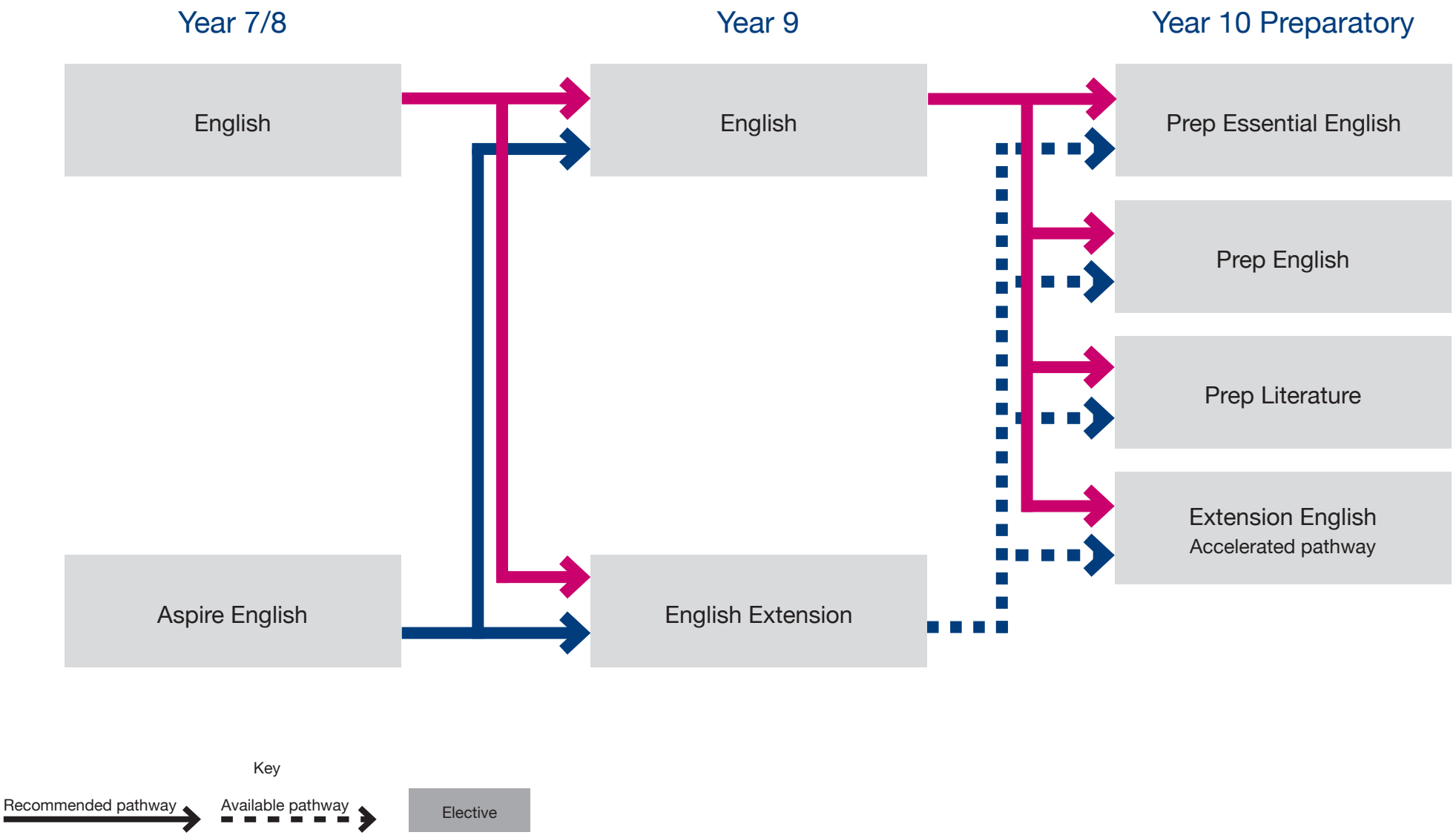
- Financial Risks and Rewards combination response exam
- Entrepreneurship project that includes a Shark Tank style presentation

Pathways

The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 10. Students can progress into Senior Accounting, Business, Legal Studies and the Diploma of Business.

English

Learning area: English



Year 7 English

Purpose

English is central to everyday life. It is important for us to be able to communicate our ideas, feelings, opinions, observations and information in order to understand, critique, appreciate and participate in our local and global communities.

Year 7 will follow the Australian Curriculum for English, which develops the three interrelated strands of Language, Literature and Literacy. Together, the strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking, writing and creating. English will challenge students to develop into dynamic communicators who can use language creatively, persuasively and analytically. Students will be exposed to a range of literary, media and screen texts that will be relevant to their own lives and also challenge them to expand their world-view.

Unit description (deep understanding)

Micro Fiction

Students develop creative writing skills by studying micro-fiction, including First Nations and Asian short stories and tech-themed micro-fiction. They craft their own micro-fiction in response to a visual prompt.

Novel Study

Students analyse Blueback by Tim Winton, exploring character values, cultural assumptions, and sustainability themes. They write an analytical essay on how the novel presents these ideas.

Analysing Poetry

Students study naval war poems and learn how poetic devices shape meaning. They create and present a poem using lines from existing poetry and write an analytical justification.

Persuasive Speaking

Students explore persuasive speaking by studying Roman oration and evaluating spoken texts. They plan and deliver their own persuasive multimodal speech on a contemporary issue.

Key skills

- Communicate with peers, teachers, individuals, groups and community members in a range of face-to-face and online/virtual environments
- Listen to, read, view, interpret, analyse, evaluate and perform a range of spoken, written and multimodal texts
- Create a range of imaginative, informative and persuasive types of texts, controlling for context, purpose and audience
- Use the conventions of written and spoken/signed English

Assessment overview

Students will create and respond to a range of written and spoken text types to persuade, inform and entertain.

Pathways

Students will progress from Year 7 English to Year 8 English. The deep knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 9 English or English Extension, if prerequisites are met. The usual progression would then be the study of Senior English in Year 11 and 12. Enrichment opportunities exist for students in Year 10, 11 and 12 with the English Literature course, and the English Literature and Extension course (Year 12 only).

Year 8 English

Purpose

English is central to everyday life. It is important for us to be able to communicate our ideas, feelings, opinions, observations and information in order to understand, critique, appreciate and participate in our local and global communities.

Year 8 will follow the Australian Curriculum for English, which develops the three interrelated strands of Language, Literature and Literacy. Together, the strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking, writing and creating. English will challenge students to develop into dynamic communicators who can use language creatively, persuasively and analytically. Students will be exposed to a range of literary, media and screen texts that will be relevant to their own lives and also challenge them to expand their world-view.

Unit description (deep understanding)

Our Place

Students listen to, read and interpret poetry about and from Aboriginal and Torres Islander histories and cultures to explore how poets express personal perspectives of the relationship between identity and place.

Shakespeare's Macbeth

Students listen to, view and read a range of texts that explore the different historical, social and cultural contexts of Shakespeare's times and discuss the ways these can influence how audiences interpret his stories.

Key skills

- Communicate with peers, teachers, individuals, groups and community members in a range of face-to-face and online/virtual environments
- Listen to, read, view, interpret, analyse, evaluate and perform a range of spoken, written and multimodal texts
- Create a range of imaginative, informative and persuasive types of texts, controlling for context, purpose and audience
- Use the conventions of written and spoken/signed English

Assessment overview

Students will create and respond to a range of written and spoken text types to persuade, inform and entertain.

Pathways

Students will progress from Year 8 English to Year 9 English. The deep knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 9 English or English Extension, if prerequisites are met. The readiness criteria for English Extension is a minimum B in all criteria in Year 8 English or Year 8 Aspire English. The usual progression would then be the study of Senior English in Year 11 and 12. Enrichment opportunities exist for students in Year 10, 11 and 12 with the English Literature course, and the English Literature and Extension course (Year 12 only).

Year 9 English

Purpose

English is central to everyday life. It is important for us to be able to communicate our ideas, feelings, opinions, observations and information in order to understand, critique, appreciate and participate in our local and global communities.

Year 9 will follow the Australian Curriculum for English, which develops the three interrelated strands of Language, Literature and Literacy. Together, the strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking, writing and creating. English will challenge students to develop into dynamic communicators who can use language creatively, persuasively and analytically. Students will be exposed to a range of literary, media and screen texts that will be relevant to their own lives and also challenge them to expand their world-view.

Unit description (deep understanding)

Imagining the Future

Students listen to, read and view a variety of speculative fiction texts to explore how literary texts can explore ideas about their own society and the future of humanity by creating a vision of the future, or an alternate world.

A Biased Affair

Students listen to, read and view news media texts (television current affair stories) to examine how different news media texts represent social and ethical issues, and offer explanations for these different representations.

Persuasive

In this unit, students learn how to craft and deliver a persuasive speech on a topic of their choice. They explore techniques such as emotive language, rhetorical questions, repetition, and evidence-based reasoning to influence an audience. Through analysing examples of powerful speeches and practising their own, students develop skills in planning, structuring, and presenting arguments with clarity, confidence, and impact.

Personal Storytelling

In this unit, students explore the art of personal storytelling by reflecting on significant experiences from their own lives. They learn how to shape these memories into engaging narratives, experimenting with voice, structure, and descriptive language to connect with an audience. Through reading and listening to examples of personal stories, students develop techniques to convey emotion, build authenticity, and craft a story that is both meaningful and memorable.

Key skills

- Communicate with peers, teachers, individuals, groups and community members in a range of face-to-face and online/virtual environments
- Listen to, read, view, interpret, analyse, evaluate and perform a range of spoken, written and multimodal texts
- Create a range of imaginative, informative and persuasive types of texts, controlling for context, purpose and audience
- Use the conventions of written and spoken/signed English

Assessment overview

Students will respond to and create a range of written and spoken text types to persuade, inform and entertain.

Pathways

The deep knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 10 English or Year 10 Literature. The usual progression would then be the study of Senior English, or Senior Literature in Year 11 and 12. Enrichment opportunities exist for students in the English Literature and Extension course in Year 12 only.

English Extension (Year 9)

Purpose

English is central to everyday life. It is important for us to be able to communicate our ideas, feelings, opinions, observations and information in order to understand, critique, appreciate and participate in our local and global communities.

Year 9 will follow the Australian Curriculum for English, which develops the three interrelated strands of Language, Literature and Literacy. Together, the strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking, writing and creating. English will challenge students to develop into dynamic communicators who can use language creatively, persuasively and analytically. Students will be exposed to a range of literary, media and screen texts that will be relevant to their own lives and also challenge them to expand their world-view. The readiness criteria for English Extension is a minimum B in all criteria in Year 8 English or Year 8 Aspire English.

Key skills

- Communicate with peers, teachers, individuals, groups and community members in a range of face-to-face and online/virtual environments
- Listen to, read, view, interpret, analyse, evaluate and perform a range of spoken, written and multimodal texts
- Create a range of imaginative, informative and persuasive types of texts, controlling for context, purpose and audience
- Use the conventions of written and spoken/signed English

Assessment overview

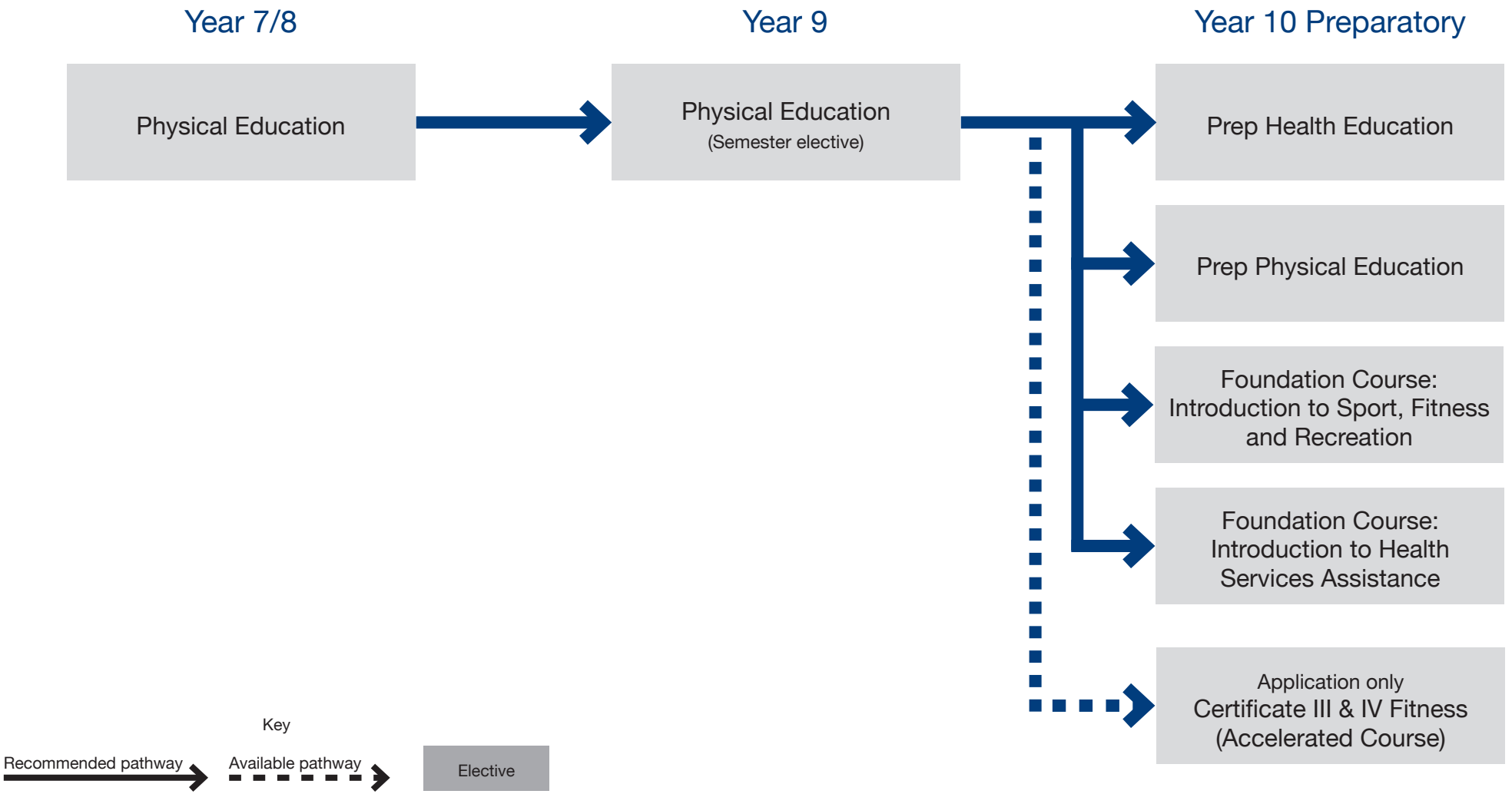
Students will respond to and create a range of written and spoken text types including: novels, speculative fiction, reviews, persuasive speeches, news media texts, opinion pieces, plays and interior monologues.

Pathways

The deep knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 10 English or Year 10 Literature. The usual progression would then be the study of Senior English, or Literature in Year 11 and 12. Enrichment opportunities exist for students in the English Extension course (Year 12 only).

Health & Physical Education

Learning area: Health and Physical Education



Health and Physical Education (Year 7)

Purpose

In Health and Physical Education (HPE), students investigate and use strategies and practices that enhance their own and others' health, well-being and safety. Students learn about a range of help-seeking strategies that support their access to, and evaluation of, health and physical activity information and services. Students will acquire movement skills and strategies that enable them to confidently and competently participate in a range of physical activities. They will learn to apply and transfer the movement skills and concepts to a variety of physical activities.

The Year 7 Health and Physical Education course aligns with the Australian Curriculum HPE syllabus to develop knowledge and understanding and skills relating to the areas of:

- Food and Nutrition
- Benefits of Physical Activit
- Invasion Games
- Athletics

Unit description (deep understanding)

Unit 1: Nutrition

This unit focuses on the impact nutrition has on our health and well-being. Students will learn the importance of nutrients, vitamins and minerals as well as analysing factors that influence food choices within a person's life. Students evaluate diets in accordance with the Australian Guidelines to Healthy Eating in order to make justified recommendations to enhance a variety of diets.

Unit 2: Health Benefits of Physical Activity

This unit investigates the influence and impact regular participation in physical activity has on individual and community health and well-being. Students explore the physical benefits of participating in physical activities (including the impact on health-related and skill-related components of fitness). They will also examine how social, cultural and environmental factors influence physical activity participation. Students will investigate how sedentary behaviours impact on their own health and well-being and develop strategies to encourage more physical activity in their daily routines.

Unit 3: Invasion Games

This unit focuses on investigating ways to create, use and defend space through participation in a variety of invasion games. Students will analyse offensive and defensive strategies and explore how these can be transferred to new movement challenges. Students will also develop skills that are transferrable to a range of sports enhancing their hand/eye coordination, spatial awareness, and problem-solving, decision-making communication skills within a team environment.

Unit 4: Athletics

This unit focuses on developing, refining and appraising performance in a range of athletics events. Students will understand the process athletes use to learn or acquire a new skill. This includes an understanding of the learning process, an analysis of their own and others' performance using ICTs and the implementation of constructive feedback to improve performance. As a result, students will further improve their technique and performance within a range of athletic events.

Key skills

Students will be engaged in the following health and physical education skills throughout the Year 7 course.

- Researching, analysing and evaluating data, information and evidence
- Drawing conclusions, making decisions, constructing and justifying arguments
- Synthesising information from a variety of sources and perspectives
- Creating and performing movement sequences and applying movement concepts
- Reflecting on learning, applying new understandings and justifying future applications
- Setting personal goals
- Working effectively within a g oup or team
- Solving problems in a variety of contexts

Assessment overview

The Year 7 Assessment program includes: Ongoing practical assessment, an exam and an assignment.

Pathways

Students will progress from Year 7 HPE to Year 8 HPE. They will then have the opportunity to select Year 9 HPE as one of their elective subjects. In Year 10, the HPE course splits into four pathways for students to choose from in Senior School: Physical Education, Health Education, Introduction to Fitness, Sport & Recreation, and Health Services.

Health and Physical Education (Year 8)

Purpose

Health and Physical Education provides a foundation for students to learn how to take positive action to enhance their own and others' health and well-being in varied contexts and to adopt lifelong healthy, active living. Students will learn about key issues affectin the health and well-being of young people and their communities. They will learn how to apply problem-solving techniques to improve health and well-being. Students will acquire movement skills and strategies that enable them to confidently and competently participate in a range of physical activities.

The Year 8 Health and Physical Education course aligns with the Australian Curriculum HPE syllabus to develop knowledge and understanding and skills relating to the areas of:

- Alcohol and Other Drugs
- Relationships and Sexuality
- Fielding and Striking
- Lifesaving

Unit description (deep understanding)

Unit 1: Alcohol and Other Drugs

This unit focuses on investigating the short and long term effects of alcohol and drug use and the associated laws. It will explore the reasons why young people choose to use or not use alcohol and propose strategies to make informed decisions. Students will examine the factors that influence people's behaviours, decisions and actions. They will also develop a range of communication and negotiation skills to combat peer pressure.

Unit 2: Relationships and Sexuality

This unit explores physical, social and emotional changes that occur over time and the impact these changes have on students' identities. Students will learn about the reproductive system and the process of conception, the diffe ent types of contraception and the importance of consent. Through a range of scenario based activities, students will evaluate and practise strategies to manage changes and emotions associated with puberty and becoming a young adult.

Unit 3: Fielding and Striking Games

This unit focuses on developing an understanding of the tactics and strategies of striking and fielding games, as well as recognising the importance of improving the skills and techniques in order to implement the tactics they wish to use. Students will seek to improve individual and team performance through modifications to effort, space and tim

Unit 4: Life Saving

This unit focuses on developing the skills and knowledge required to save their own and others' lives. Students will learn water safety skills and develop a knowledge and understanding of how to be safe when in, on and around the water, including survival skills and rescue techniques.

Key skills

Students will be engaged in the following health and physical education skills throughout the Year 8 course.

- Researching, analysing and evaluating data, information and evidence
- Drawing conclusions, making decisions and constructing arguments
- Synthesising information from a variety of sources and perspectives
- Proposing, justifying, implementing and monitoring plans or actions to achieve goals
- Creating and performing movement sequences and applying movement concepts
- Reflecting on learning, applying new understandings and justifying future applications
- Setting personal goals
- Working effectively within a g oup or team
- Solving problems in a variety of contexts

Assessment overview

The Year 8 Assessment program includes: Ongoing practical assessment, a combination response exam and podcast.

Pathways

Students will progress from Year 8 HPE and have the opportunity to select HPE as one of their elective subjects in Year 9. In Year 10, the HPE course splits into four pathways for students to choose from in Senior School: Physical Education, Health Education, Introduction to Fitness, Sport & Recreation, and Health Services.

Health and Physical Education (Year 9)

Purpose

Health and Physical Education provides students with the knowledge and skills to critically analyse factors that influence their identities, relationships, decisions and behaviours. Students will analyse people's attitudes and beliefs about diversity and the effects this has on community connection and well-being. They will evaluate the effects of emotional responses to diffe ent situations and access, synthesise and apply health information from credible sources to propose and justify responses to health situations. Students will apply movement concepts and strategies to new and challenging practical activities. They will also identify and apply criteria to make judgments about their own and others' movement performances. Working collaboratively, they will design and apply solutions to movement challenges.

The Year 9 Health and Physical Education course aligns with the Australian Curriculum HPE syllabus to develop knowledge and understanding and skills relating to the areas of:

- Indigenous Health
- Exercise Physiology
- Net/Wall Games
- Rock Climbing

Unit description (deep understanding)

Unit 1: Indigenous Health

This unit focuses on developing students' understanding of the health issues faced by Indigenous populations as a result of historical events and a range of health inequities. Students will learn how low education levels can negatively affect a person's holistic health due to barriers faced. Students will investigate the Closing the Gap Policy and evaluate the effectiveness using a range of health frameworks. Students will develop research and writing skills in order to draw conclusions within the health context.

Unit 2: Exercise Physiology

This unit will investigate the concepts and skills required to improve or maintain physical activity and fitnes levels; for example, target training heart-rate zones and how these zones relate to health, well-being and fitness Students will also design, implement and evaluate a personalised fitness plan linked to the components of health and skill-related fitness and training methods

Unit 3: Net/Wall Games

This unit focuses on developing an understanding of the tactics and strategies of net/wall games, as well as recognising the importance of improving the skills and techniques in order to implement the tactics they wish to use. Students will seek to improve individual and group performance by using knowledge or results feedback to perform a skill with greater accuracy or control.

Unit 4: Challenge and Adventure Activities — Rock Climbing

This unit is designed to challenge students physically and socially, by adapting and responding to changes in equipment to increase the complexity of a climb. Tuition will be delivered by trained instructors at a local indoor rock climbing centre. Students will be required to provide and apply teacher and peer feedback to enhance performance.

Key skills

Students will be engaged in the following health and physical education skills throughout the Year 9 course.

- Researching, analysing and evaluating data, information and evidence
- Drawing conclusions, making decisions and constructing arguments
- Synthesising information from a variety of sources and perspectives
- Proposing, justifying, implementing and monitoring plans or actions to achieve goals
- Creating and performing movement sequences and applying movement concepts
- Reflecting on learning, applying new understandings and justifying future applications
- Setting personal goals
- Working effectively within a g oup or team
- Solving problems in a variety of contexts

Assessment overview

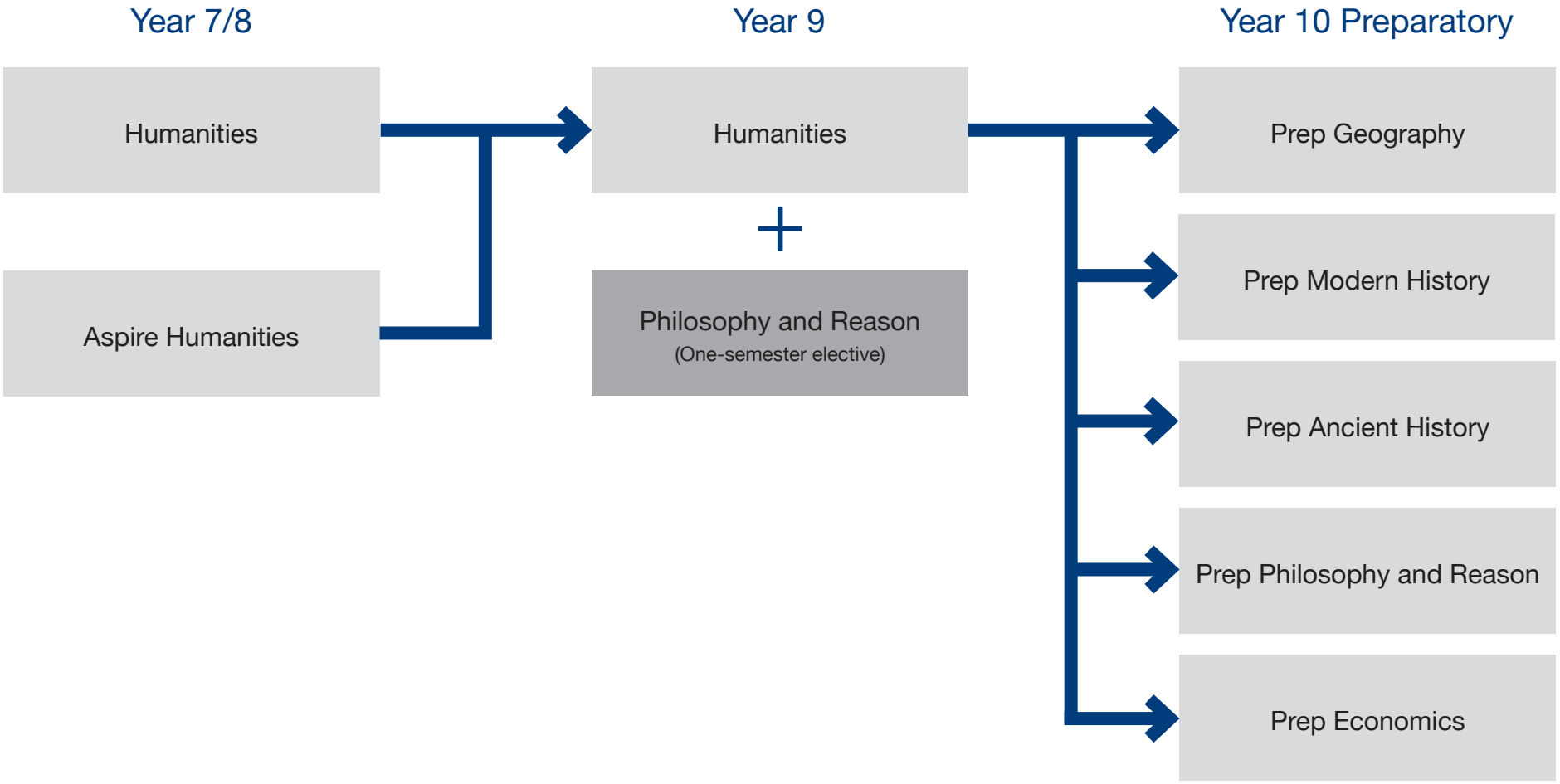
The Year 9 Assessment program includes: Practical assessment, an analytical exposition and a report.

Pathways

Students will progress from Year 9 HPE and have the opportunity to select a range of options as their elective subject/s in Year 10 due to the course splitting into four pathways in Senior School: Physical Education, Health Education, Introduction to Fitness, Sport & Recreation, and Health Services and an accelerated course Certificate III & IV Fitness course. The accelerated course is able to be selected by who have met high enough academic, effort, behaviour and homework results during Year 9 HPE.

Humanities

Learning area: Humanities



Year 7

Year 7 Humanities is a one year course that includes a semester of History and Geography, as well as elements of the Economics and Civics and Citizenship curriculum. The course also develops strong links with Year 7 English, Mathematics, Science and digital skills.

Through the study of Humanities, students will develop skills and strategies to become knowledge seekers and critical thinkers who are willing to take risks and challenge not only themselves, but also the conventions of thinking. They will demonstrate empathy and understand their role as active, responsible and informed global citizens. The study of Humanities allows students to develop and reflect on their own and others' views of the world.

Geography

Purpose

In Year 7 Geography, students learn about the connections between people, places and environments. They explore how different people perceive and value places in different ways, and why environments are important to people's lives.

Students describe patterns in the distribution of features or phenomena across places and begin to explain the links between people, places and environments. They investigate how these interconnections can bring about changes in places and environments.

They also examine a geographical issue or challenge and describe a response or strategy that could be used to address it.

Course outline

The Year 7 Geography course aims to develop a student's geographical knowledge and understanding, as well as geographical inquiry and communication skills. Students will participate in fieldwork on an excursion at a local level.

Unit description (deep understanding)

Water and the World

Students will investigate water as an example of a renewable environmental resource; the many uses of water, the ways it is perceived and valued, its different forms as a resource, the ways it connects places as it moves through the environment, its varying availability in time and across space, and its scarcity. Students will examine the concept of environment and its specific hazards, through studies drawn from countries around the world.

Place and Liveability

Students will investigate Place and Liveability; the factors that influence liveability and how it is perceived; the idea that places provide us with the services and facilities needed to support and enhance our lives; and that spaces are planned and managed by people. Students will evaluate the liveability of their own place and investigate whether it can be improved through planning. The liveability of places is investigated using studies drawn from Australia and Europe.

Key skills

Students will develop and consolidate the following geographical skills throughout the Year 7 course.

- Develop geographical questions and plan a geographical inquiry
- Collect, select and record relevant geographical data and information
- Represent data in a range of forms including graphs and maps, with and without the use of spatial technologies
- Analyse geographical data to identify and explain spatial patterns, trends and relationships
- Apply geographical concepts to draw conclusions based on the analysis of data and information collected
- Present findings, arguments and ideas in a range of forms
- Propose actions in response to geographic challenges and reflect on thes

Assessment overview

The Year 7 Assessment program includes: knowledge and understanding tests, presentation of fieldwork data and community forum tasks.

History

Purpose

The Australian Curriculum: History provides opportunities to develop knowledge and understanding through key concepts, including evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts will be applied through two in-depth research assignments that concentrate on the Ancient World.

The Year 7 History curriculum will focus on the time of the earliest human communities to the end of the medieval period, approximately 60,000 BC (BCE) – c.500 AD (CE). This is a period defined by the development of organised societies, cultural practices and expanding empires. 'Investigating the Ancient Past' is the study of the ancient world including the discoveries (the remains of the past and what we know) and the mysteries (what we do not know) about this period of history, in a range of locations. 'Ancient Rome' will be used as a case study of a great civilisation, its rise and fall, as well as the changes that occured and the reasons for its collapse.

Course outline

The Year 7 History course aims to develop a student's historical knowledge and understanding, as well as skills, through the process of historical inquiry. Students will be encouraged to think critically about their past and develop skills in historical research and writing.

Unit description (deep understanding)

Deep time history of Australia

In this unit, students explore Australia's history over a very long period — known as deep time — which stretches back tens of thousands of years. They learn that Aboriginal and Torres Strait Islander Peoples have the oldest continuous cultures in the world and have lived in Australia for more than 60,000 years. By studying this unit, students begin to see Australia's history not just as recent events but as a story that goes back tens of thousands of years, shaped by the deep knowledge and cultures of First Nations Australians.

The Ancient World: Rome (c.750BCE – 500CE)

Students will investigate the physical features of Ancient Rome, its emergence and development, key characteristics of society and daily life (farming, trade, social classes, religion, entertainment, laws) and the causes of the fall of the Empire.

Key skills

Students will develop and consolidate the following historical inquiry skills throughout the Year 7 course.

- Sequence historical events, developments and periods
- Use historical terms and concepts
- Identify a range of questions to develop a historical inquiry
- Identify the origin and purpose of primary and secondary sources
- Identify and locate relevant sources
- Draw conclusions about the usefulness of sources
- Identify and describe points of view, attitudes and values in primary and secondary sources
- Develop rational and logical arguments in an historical context
- Communicate ideas using a range of texts, including digital technologies

Assessment overview

The Year 7 Assessment program includes: Response to stimulus tests and a historical inquiry task.

Pathways for Year 7 Humanities

Students will progress from Year 7 Humanities to Year 8 Humanities. The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 8.

Year 8

Year 8 Humanities is a one-year course that includes a semester of History and Geography, as well as elements of Economics and Civics and Citizenship curriculum, where appropriate. The course also develops strong links with the Year 8 English, Mathematics, Science and Visual and Performing Arts curriculum.

Through the study of Humanities, students will develop skills and strategies to become knowledge seekers and critical thinkers, who analyse and evaluate sources to challenge not only themselves, but also the conventions of thinking. They will display empathy and respect towards other people and understand their role as active, responsible and informed global citizens. The study of Humanities allows students to develop and reflect on their own and others' views of the world and the misconceptions of prejudice.

Geography

Purpose

In Year 8 Geography, students explore how people and natural processes shape the world around them. They investigate how human activities and environmental processes interact to influence the characteristics of different places. Students consider how places are valued and perceived differently by diverse groups of people.

They examine the effects of human activity and natural hazards on environments, and they learn to describe patterns in the distribution of features or phenomena and what these patterns mean for people and places.

Throughout the year, students explore the interconnections between people, places and environments, explaining how these links bring about changes in landscapes and communities. They also investigate a geographical issue or challenge and explain possible responses or strategies, considering environmental, economic and social factors.

Course outline

The Year 8 Geography course aims to develop a student's geographical knowledge and understanding, as well as geographical inquiry and skills.

Unit description (deep understanding)

Landforms and Landscapes

Students will investigate geomorphology through a study of landscapes and their landforms. This unit examines the processes that shape individual landforms, the values and meanings placed on landforms and landscapes by diverse cultures, hazards associated with landscapes, and management of landscapes. Landforms and landscapes develops students' understanding of the concept of environment and enables them to explore the significance of landscapes to people and how these are managed.

Changing Nations

Students will investigate the changing human geography of countries, as revealed by shifts in population distribution. The unit explores the process of urbanisation and draws on a study of a country of the Asian region to show how urbanisation changes the economies and societies of low- and middle-income countries. Students will also examine reasons for internal and external migration, including the causes of forced migration, refugees and asylum seekers.

Key skills

Students will develop and consolidate the following geographical skills throughout the Year 8 course.

- Develop geographical questions and plan a geographical inquiry
- Collect, select and record relevant geographical data and information
- Represent data in a range of forms including graphs and maps, with and without the use of spatial technologies
- Analyse geographical data to identify and explain spatial patterns, trends and relationships
- Apply geographical concepts to draw conclusions based on the analysis of data and information collected
- Present findings, arguments and ideas in a range of forms
- Propose actions in response to geographic challenges and reflect on thes

Assessment overview

The Year 8 Assessment program includes: knowledge and understanding tests, presentation of fieldwork data and an extended response task.

History

Purpose

The Australian Curriculum: History introduces and consolidates historical understanding through key concepts, including evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts will be developed through two depth studies that concentrate on the changes in the Medieval world to modernisation.

The Year 8 History curriculum provides a study of the Medieval world and the Age of Discovery. This was when major civilisations around the world came into contact with each other, resulting in many negative and positive impacts. Social, economic, religious and political beliefs were often challenged and significantly changed. It was the period when the modern world began to take shape through industrialisation and rapid change.

Course Outline

The Year 8 History course aims to develop a student's historical knowledge and understanding, as well as skills, through the process of historical inquiry. Students will be encouraged to think critically about the past and develop skills in historical research and writing.

Unit description (deep understanding)

Medieval Europe and the Early Modern World

Students will investigate how societies changed from the end of the ancient period to the beginning of the modern age and the key beliefs, social, cultural, economic and political features of Medieval Europe, as well as the relationships between Islam and the west due to the Crusades. Students will then investigate the interactions of societies during the Age of Discovery and expansion of the western world.

The Asia Paci ic World: Japan Under the Shoguns (c. 794 – 1867CE)

Students will investigate how Shogunate Japan was still in a medieval feudal system, up until European contact influenced and forced them to end isolation and modernise.

Key skills

Students will develop and consolidate the following historical inquiry skills throughout the Year 8 course.

- Sequence historical events, developments and periods
- Use historical terms and concepts
- Identify a range of questions to develop a historical inquiry
- Identify the origin and purpose of primary and secondary sources
- Locate, compare, select and use evidence from a range of sources
- Draw conclusions about the usefulness of sources
- Identify and describe points of view, attitudes and values in primary and secondary sources
- Develop rational and logical arguments in an historical context
- Communicate ideas using a range of texts, including digital technologies

Assessment overview

The Year 8 Assessment program includes: Short and extended written response tasks and a historical inquiry task.

Pathways for Year 8 Humanities

Students will progress from Year 8 to Year 9 Humanities. The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 9. The usual progression would then be the study of Senior Humanities subjects, including Ancient History, Modern History, Economics, Philosophy and Reason, Geography or Social and Community Studies. Year 9 Humanities will offer a 'taster' of each of these subjects, with the exception of Philosophy, which will be a semester elective.

Year 9

Year 9 Humanities is a one-year course that includes a semester of History studies and a semester of Geography with Economics incorporated throughout the units. Philosophy will be offered as an elective. This course has been designed to allow students to experience a variety of Humanities subjects which will be available in the Senior School. The course also develops strong links with the Year 9 English, Mathematics, Science and Senior Humanities curriculum.

Through the study of Humanities, students will develop skills and strategies to become knowledge seekers and critical thinkers, who are willing to take risks and challenge not only themselves, but also the conventions of thinking. They will display empathy and understand their role as active, responsible and informed global citizens. The study of Humanities allows students to develop and reflect on their own and others' views of the world.

Geography

Purpose

In Year 9 Geography, students investigate the dynamic relationship between people, places and environments. They explore how human activities and natural processes shape and change the characteristics of different places. Students examine how people impact environments and how, in turn, environments influence the ways people live and work.

They study the distribution of biomes around the world and consider what this means for environmental sustainability. Throughout the year, students analyse the complex interconnections between people, places and environments, explaining how these connections influence human decisions and bring about change in landscapes and communities.

To apply their learning, students investigate a current geographical phenomenon or challenge and propose strategies to address it, evaluating these strategies through environmental, social and economic lenses.

Course outline

The Year 9 Geography course aims to develop a student's geographical knowledge and understanding, as well as geographical inquiry and skills. Students will participate in fieldwork at a local level.

Unit description (deep understanding)

Geographies of Interconnections

Students will investigate interconnections and the world's various resources. They will understand how these resources influence the economic development of countries and people around the world as well as the disparity of wealth. This unit examines the interconnections and effects of globalisation on societies, the economy and environment.

Biomes and Food Security

Students will extend on the concepts of Geography and spatial skills. They will investigate the biotic environment and its role in food and fib e production. This unit examines the biomes of the world, their alteration, significance and the environmental challenges of future sustainability. Students will conduct an inquiry into a food security issue and solve problems of sustainability for feeding the growing population.

Key skills

Students will develop and consolidate the following geographical skills throughout the Year 9 course.

- Develop geographically significant questions and apply appropriate geographical methodologies and concepts
- Evaluate sources and organise relevant geographical data
- Represent multi-variable data in a range of appropriate forms
- Represent spatial distribution of geographical phenomena using spatial technologies as appropriate
- Interpret and analyse multi-variable data
- Apply geographical and economic concepts to synthesise information from various sources;
- Present findings, arguments and explanations in a range of appropriate communication forms
- Reflect on and evaluate findings of an inquiry to propose action in response to a contemporary geographical challenge

Assessment overview

The Year 9 Assessment program includes: Response to stimulus tests and inquiry tasks.

History

Purpose

The Australian Curriculum: History provides opportunities to develop historical understanding through key concepts, including evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts may be investigated within a particular historical context to facilitate an understanding of the past and to provide a focus for historical inquiries.

The Year 9 History curriculum provides a study of Ancient and Modern History. The Ancient History unit will focus on extending students' knowledge and skills when analysing historical evidence, as well as investigate the beginnings of Imperialism. The Modern History segment will examine the Industrial Revolution and motives for British imperialism and colonisation. This will then lead an inquiry into the causes and effects of orld War I, 1914–1918.

Course outline

The Year 9 History course aims to develop a student's historical knowledge and understanding, as well as skills, through the process of historical inquiry. Students will be encouraged to think critically about their past and develop skills in historical research and writing. Opportunities will be provided for students to visit the Queensland Museum, participate in incursions, as well as view various media based on historical content.

Unit description (deep understanding)

Making of the Modern World

In this unit, students will investigate how rapid industrialisation created major technological, social, political and economic change throughout Britain and the wider world. This massive growth led to Britain's expansionist policies, which led to the largest empire the world has seen.

WWI (1750 – 1918)

Students will examine the resources gained from Empires and the technological innovations that led to the Industrial Revolution. They will examine the short- and long-term impacts of this rapid change, specifically as a driving factor for economic imperialism and the need for more colonies. Students will then investigate the causes of WWI, the nature of war and Australian experiences.

WWII (1939-1945)

For those students who do not choose History in the senior school, we consider it essential that they are exposed to World War II. Accordingly, in a bridging unit students will study the causes, outbreak, and course of the Second World War, as well as the significance of Australia's involvement.

Key skills

Students will develop and consolidate the following historical inquiry skills throughout the Year 9 course.

- Use chronological sequencing to demonstrate the relationship between events and developments
- Identify and locate relevant sources, using ICT and other methods
- Analysis and use of sources
- Identify the origin, purpose and context of primary and secondary sources
- Process and synthesise information from a range of sources for use as evidence in an historical argument
- Evaluate the reliability and usefulness of primary and secondary source
- Identify and analyse the perspectives of people from the past
- Identify and analyse diffe ent historical interpretations (including their own)
- Develop texts, particularly descriptions and discussions that use evidence from a range of sources that are referenced
- Select and use a range of communication forms (oral, graphic, written) and digital technologies

Assessment overview

The Year 9 Assessment program includes: Response to stimulus tests and a historical inquiry task.

Pathways for Year 9 Humanities

Students will progress from Year 9 Humanities to the Year 10 Preparation Humanities courses. The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 10. The usual progression would then be the study of a Senior Humanities subjects including Ancient History, Modern History, Economics, Philosophy and Reason, Geography or Social and Community Studies.

Introduction to Philosophy (Year 9)

Year 9 Elective

Year 9 Introduction to Philosophy is a semester elective course which includes topics that explore the human conditions, as well as logic and reasoning. The course will provide students an introduction to Philosophy, developing the ability to think critically, write with clarity, construct a meaningful argument and apply philosophical frameworks and reason to their daily lives.

The study of Philosophy allows students to analyse various political, ethical and scientific positions. Students develop their reasoning and decision-making skills. Study in this area is especially useful for the application of reasoning and logic skills learned through a variety of activities and thinking strategies.

Purpose

The Introduction to Philosophy course allows students to examine their own beliefs and learn what rational thinking looks like. This will be achieved through questioning, discussions, collaboration with peers, engagement with a range of sources and investigating contemporary issues. Students will to be taught the skills to justify positions in both written and verbal form, develop rational views on major issues and use logic. It will be of benefit to any student who wishes to improve their thinking skills, be critical, open-minded, have an unprejudiced approach to the use of logical analysis and have an improved understanding of the underlying cultural, social, moral and religious structures of the world.

Course outline

Introduction to Philosophy will focus on exploring the Human Condition and Argumentation. The units will ensure that students are ready to study Philosophy and Reason in Senior School. The subject also provides a framework for research and reference skills, synthesis and written communication, which are essential for all Senior Humanities subjects.

Deep understanding

Introduction to Philosophy

Fundamental concepts, skills, knowledge and understanding of the discipline of Philosophy. Examination of own beliefs and values, as well as ways in which arguments are formed.

Using Logic in Philosophy

The fundamentals of arguments and applying logic.

Being Human

Investigation of the diffe ent philosophical frameworks for what it means to be human and to live in the contemporary world.

Key skills

Students will develop and consolidate the following skills throughout the Year 9 course.

- An improved ability to think clearly, analytically and creatively
- A critical, open-minded and unprejudiced approach to the use of logical analysis
- An improved ability to interpret verbal information and to express themselves clearly
- An improved understanding of cognitive and metacognitive processes (theirs and others)
- An improved understanding of the underlying cultural, social, moral and religious structures of the world
- Organise and synthesise ideas and information to construct arguments
- Evaluate claims and arguments inherent in theories, views and ideas
- Create responses that communicate meaning to suit purpose

Assessment overview

The Year 9 Assessment program includes: Short written responses, practical exercises, multimodals and essay responses.

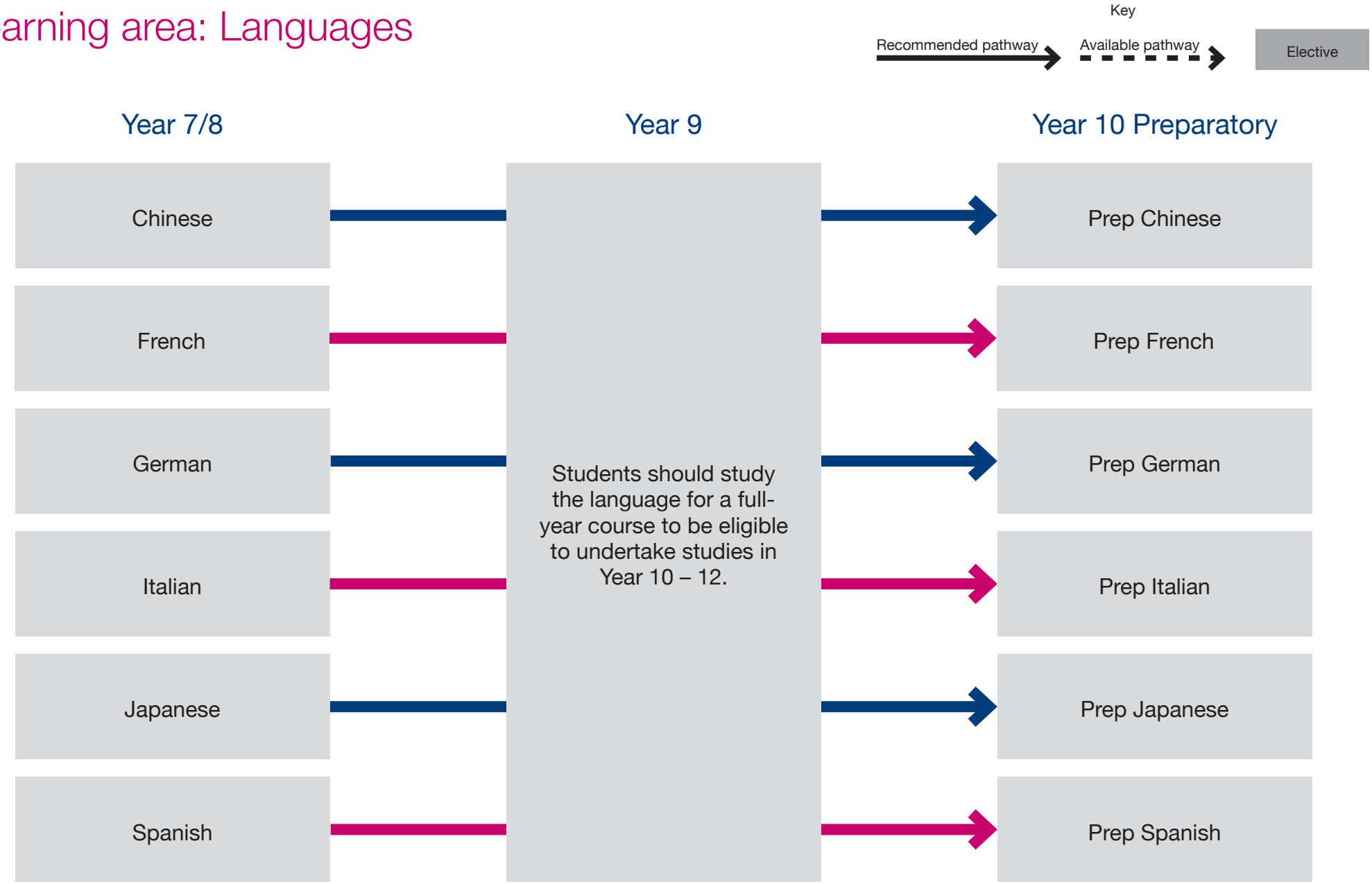
Pathways

Students will progress from Year 9 Humanities to the Year 10 Preparation Humanities courses. The knowledge and skills developed as a result of the study of this course will prepare students for further development in Year 10. The usual progression would then be the study of one or more Senior Humanities subjects, which include Ancient History, Modern History, Economics, Philosophy and Reason, Geography or Social and Community Studies.

A course of study in Philosophy and Reason can establish a basis for further education and employment in the fields of business, communication, ethics, journalism, law, politics, professional writing, psychology, science research or teaching.

Languages

Learning area: Languages



Year 7 Languages

Purpose

Learning an additional language widens horizons and prepares learners for meaningful, productive lives in a culturally and linguistically diverse world. It allows students to explore how a culture is expressed through its language and how their own sense of self and cultural identity is influenced by the language that they speak. The curriculum offers learners the opportunity to begin learning a new language or to build further basic skills in the language studied at primary school.

At State High, students choose from the following languages: Chinese, French, German, Italian, Japanese and Spanish.

Unit description (deep understanding)

Learning another language involves learning how to use the language to communicate with others as well as learning how the language works as a system of communication. Learners will be engaged in a range of language tasks which reflect real-life purpose and which require them to comprehend written and spoken language and to compose written and spoken language. They will understand that a language has a system of grammar which is needed to structure communication for comprehension and compare the structure of English with that of the language being learned. They will understand that the words used in another language are shaped by cultural requirements and cultural understandings.

Learners will use language to communicate about a range of topics such as:

- Greetings
- Personal identity
- Family
- Places and nationality
- Numbers
- Holidays, festivals and celebrations

Key skills

- Communicating meaning in target language
- Understanding language and culture
- Creative thinking and problem-solving using their knowledge and language skills to solve communication needs

Assessment overview

Learners' language development will be assessed by tasks requiring comprehension of language (listening and reading) with responses in English and composing (speaking and writing) in the language.

Pathways

The language selected in Year 7 will be studied for one semester in Year 7 and one semester in Year 8 and 9. Students who are considering or intending to study a language in the Senior phase of schooling (Year 10 to 12) should also choose to do an extra semester of language in Year 9, Semester 2.

Year 8 Languages

Purpose

Learning an additional language widens horizons and prepares learners for meaningful, productive lives in a culturally and linguistically diverse world. It allows students to explore how a culture is expressed through its language and how their own sense of self and cultural identity is influenced by the language that they speak. The curriculum offers learners the opportunity to continue developing their language skills and proficiency in using the language to express their own ideas when interacting with their peers and others.

At State High, students choose from the following languages: Chinese, French, German, Italian, Japanese and Spanish.

Unit description (deep understanding)

Learning another language involves learning how to use the language to communicate with others as well as learning how the language works as a system of communication. Learners will be engaged in a range of language tasks which reflect real-life purpose and which require them to comprehend written and spoken language and to compose written and spoken language. They will understand that a language has a system of grammar which is needed to structure communication for comprehension and compare the structure of English with that of the language being learned. They will understand that the words used in another language are shaped by cultural requirements and cultural understandings.

Learners will use language to communicate about a range of topics such as:

- Home and school
- Places and nationalities
- Sports, pastimes and hobbies
- Food and drink
- Holidays, festivals and celebrations

Key skills

- Communicating meaing in target language
- Understanding language and culture
- Creative thinking and problem-solving using their knowledge and language skills to solve communication needs

Assessment overview

Learners' language development will be assessed by tasks requiring comprehension of language (listening and reading) with responses in English and composing (speaking and writing) in the language.

Pathways

The language selected in Year 7 will continue to be studied for one semester in Year 8 and one semester in Year 9. Students who are considering or intending to study a language in the Senior phase of schooling (Year 10 to 12) should also choose to do an extra semester of language in Year 9, Semester 2.

Year 9 Languages — Semester 1

Purpose

Learning an additional language widens horizons and prepares learners for meaningful, productive lives in a culturally and linguistically diverse society and world. It allows students to explore how a culture is expressed through its language and how their own sense of self and cultural identity is influenced by the language that they speak. The curriculum offers learners the opportunity to continue developing their language skills and proficiency in using the language to express their own ideas when interacting with their peers and others.

At State High, students choose from the following languages: Chinese, French, German, Italian, Japanese and Spanish.

Unit description (deep understanding)

Learning another language involves learning how to use the language to communicate with others as well as learning how the language works as a system of communication. Learners will be engaged in a range of language tasks which reflect real-life purpose and which require them to comprehend written and spoken language and to compose written and spoken language. They will understand that a language has a system of grammar which is needed to structure communication for comprehension and compare the structure of English with that of the language being learned. They will understand that the words used in another language are shaped by cultural requirements and cultural understandings.

Learners will use language to communicate about a range of topics such as:

- Family and friends, describing people
- Daily activities, meals, shopping, sport
- Going places and transport
- Holidays, festivals and celebrations

Key skills

- Communicating meaning in the target language
- Understanding language and culture
- Creative thinking and problem-solving using their knowledge and language skills to solve communication needs

Assessment overview

Learners' language development will be assessed by tasks requiring comprehension of language (listening and reading) with responses in English and composing (speaking and writing) in the language.

Pathways

The language selected in Year 7 and continued for one semester in Year 8 will continue to be studied for one semester in Year 9. Students who are considering or intending to study a language in the Senior phase of schooling (Year 10 to 12) should also choose to complete an extra semester of language in Year 9, Semester 2.

Year 9 Languages — Semester 2

Purpose

Learning an additional language widens horizons and prepares learners for meaningful, productive lives in a culturally and linguistically diverse world. It allows students to explore how a culture is expressed through its language and how their own sense of self and cultural identity is influenced by the language that they speak. The curriculum offers learners the opportunity to continue developing their language skills and proficiency in using the language to express their own ideas when interacting with their peers and others.

At State High, students choose from the following languages: Chinese, French, German, Italian, Japanese and Spanish.

Unit description (deep understanding)

Learning another language involves learning how to use the language to communicate with others as well as learning how the language works as a system of communication. Learners will be engaged in a range of language tasks which reflect real-life purpose and which require them to comprehend written and spoken language and to compose written and spoken language. They will understand that a language has a system of grammar which is needed to structure communication for comprehension and compare the structure of English with that of the language being learned. They will understand that the words used in another language are shaped by cultural requirements and cultural understandings.

Learners will use language to communicate about a range of topics such as:

- Daily routines, weekend activities, household tasks
- Holidays and travel
- Pastimes and interests, cinema and music
- Shopping and eating
- Occupations and plans
- Holidays, festivals and celebrations

Key skills

- Communicating meaning in the target language
- Understanding language and culture
- Creative thinking and problem-solving using their knowledge and language skills to solve communication needs

Assessment overview

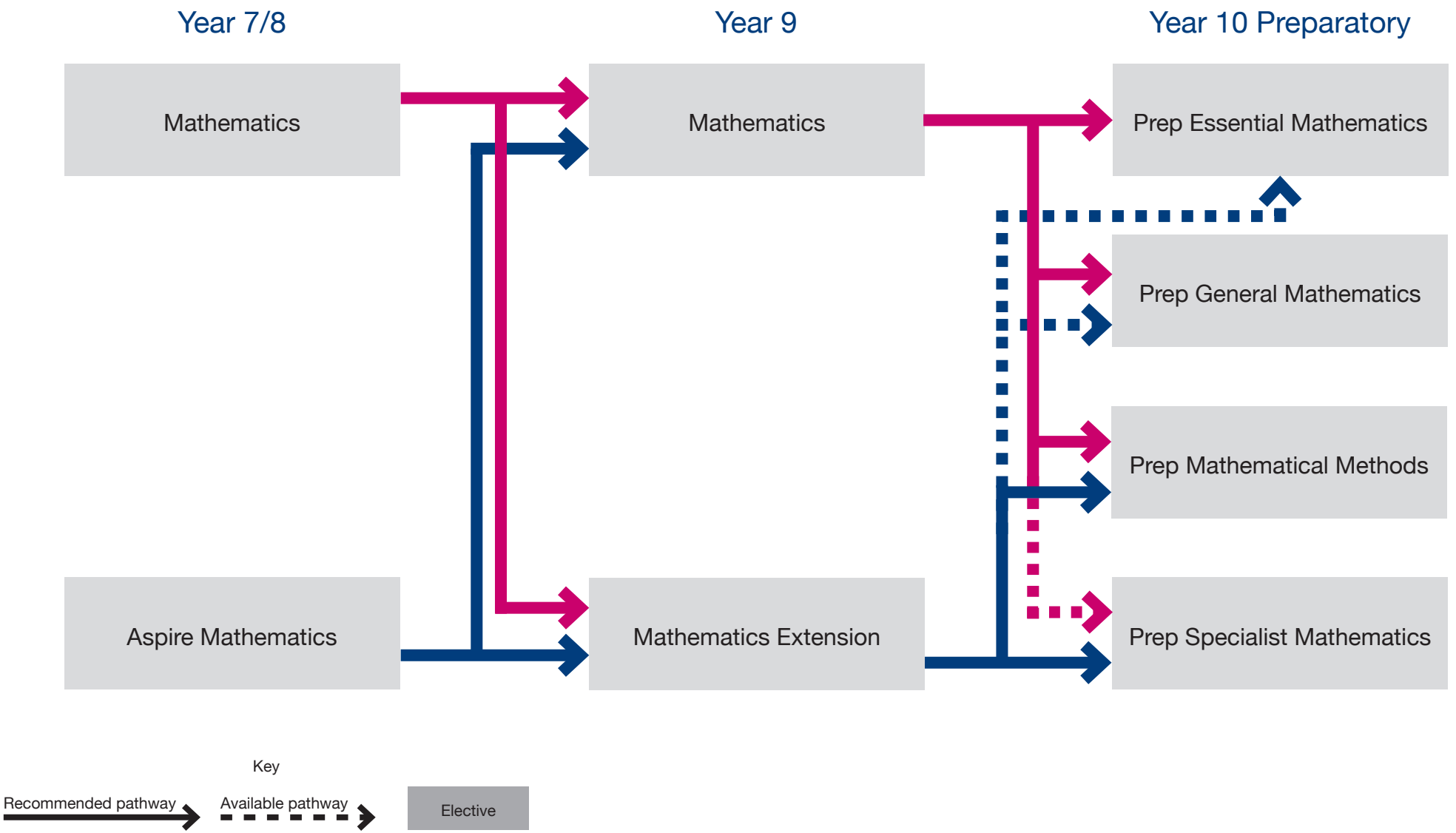
Learners' language development will be assessed by tasks requiring comprehension of language (listening and reading) with responses in English and composing (speaking and writing) in the language.

Pathways

Semester 2 in Year 9 is an **essential** subject for students who are considering or intending to study a language in the Senior phase of schooling (Year 10 to 12). **Students who have a background knowledge of a language taught at school through family or other study, and who wish to take the language for Senior study, should consult the Head of Languages to determine the appropriate level to enter the language course.**

Mathematics

Learning area: Mathematics



Year 7 Mathematics

Purpose

Through the study of Mathematics at State High, students will be provided with opportunities to:

- become confident, creative users and
- communicators of Mathematics;
- be able to investigate, represent and interpret situations in their personal and work lives and as active citizens;
- develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes and be able to pose and solve problems and reason in Number and Algebra, Measurement and Geometry, and Statistics and Probability;
- recognise connections between the areas of Mathematics and other disciplines; and
- appreciate Mathematics as an accessible and enjoyable discipline to study.

Course outline

The Year 7 Mathematics course seeks to support students to develop a solid foundation of knowledge of numeracy. Through the Australian Curriculum: Mathematics, the construction units of work is spiralling in nature and as such, students will engage with strands on a number of occasions throughout the year at increasing levels of complexity.

Unit description (deep understanding)

Number

The Number strand develops ways of working with mental constructs that deal with correspondence, magnitude and order, for which operations and their properties can be defined. Numbers have wide ranging application and specific uses in counting, measuring and other means of quantifying situations and objects.

Algebra

The Algebra strand develops ways of using symbols and symbolic representations to think and reason about relationships in both mathematical and real-world contexts. It provides a means for manipulating mathematical objects, recognising patterns and structures, making connections, understanding properties of operations and the concept of equivalence, abstracting information, working with variables, solving equations and generalising number and operation facts and relationships.

Measurement

The Measurement strand develops ways of quantifying aspects of the human and physical world. Measures and units are defined and selected to be relevant and appropriate to the context. Measurement is used to answer questions, show results, demonstrate value, justify allocation of resources, evaluate performance, identify opportunities for improvement and manage results.

Space

The Space strand develops ways of visualising, representing and working with the location, direction, shape, placement, proximity and transformation of objects at macro, local and micro scales in natural
and constructed worlds. This includes notions such as surface, region, boundary, curve, object, dimension, connectedness, symmetry, direction, congruence and similarity.

Statistics

The Statistics strand develops ways of collecting understanding and describing data and its distribution. Statistics provide a story, or means to support or question an argument, and enables exploratory data analysis that underpins decision-making and informed judgement.

Probability

The Probability strand develops ways of dealing with uncertainty and expectation, making predictions, and characterising the chance of events, or how likely events are to occur from both empirical and theoretical bases. It provides a means of considering, analysing and utilising the chance of events, and recognising random phenomena for which it is impossible to exactly determine the next observed outcome before it occurs.

Key skills

Students further develop proficiency and positive dispositions towards mathematics and its use as they:

- extend their understanding of the integer and rational number systems, strengthen their fluency with mental calculation,
  written algorithms and digital tools; and routinely consider the reasonableness of results in context
- use exponents and exponent notation to consolidate and formalise their understanding of representations of natural numbers, and use these to make conjectures involving natural numbers by experiment with the assistance of digital tools

- recognise the use of algebraic expressions and formulas using conventions, notations, symbols and pronumerals. They interpret algebraicexpressions and formulas, use substitution to evaluate and determine unknown terms where other values are given, and solve simple equations using a variety of methods
- use mathematical modelling to solve practical problems involving rational numbers, ratios and percentages, formulating and making choices about representations, calculation strategies and communicating solutions within the context
- use variables, constants, relations and functions to express relationships in real life data and interpret key features of their representation in rules, tables and graphs
- extend their knowledge of angles to establish further relationships and apply these when solving measurement and spatial problems
- create and use algorithms to classify shapes in the plane and use tools to construct shapes, including two-dimensional representations of prisms and other objects
- use coordinates in the Cartesian plane to describe transformations
- apply the statistical investigation process to obtain numerical data related to questions of interest, choose displays for the distributions of data and interpret summary statistics for determining the centre and spread of the data in context
- conduct probability simulations and experiments involving chance events, construct corresponding sample spaces and observe related frequencies, comparing expected, simulated and experimental results.

Students will be engaged in the following Numeracy Skills throughout the Year 7 Mathematics course.

- Represent natural numbers in expanded form and as products of prime factors, using exponent notation.
- Solve problems involving squares of numbers and square roots of perfect square numbers.
- Solve problems involving addition and subtraction of integers.
- Use all 4 operations in calculations involving positive fractions and decimals, choosing efficient calculation strategies.
- Choose between equivalent representations of rational numbers and percentages to assist in calculations.
- Use mathematical modelling to solve practical problems involving rational numbers, percentages and ratios, in financial and other applied contexts, justifying choices of representation.
- Use algebraic expressions to represent situations, describe the relationships between variables from authentic data and substitute values into formulas to determine unknown values.
- Solve linear equations with natural number solutions.
- Create tables of values related to algebraic expressions and formulas, and describe the effect of variation.
- Apply knowledge of angle relationships and the sum of angles in a triangle to solve problems, giving reasons.
- Use formulas for the areas of triangles and parallelograms and the volumes of rectangular and triangular prisms to solve problems.
- Describe the relationships between the radius, diameter and circumference of a circle.
- Classify polygons according to their features and create an algorithm designed to sort and classify shapes.
- Represent objects two-dimensionally in different ways, describing the usefulness of these representations.
- Use coordinates to describe transformations of points in the plane.
- Plan and conduct statistical investigations involving discrete and continuous numerical data, using appropriate displays.
- Interpret data in terms of the shape of distribution and summary statistics, identifying possible outliers.
- Decide which measure of central tendency is most suitable and explain their reasoning.
- List sample spaces for single step experiments, assign probabilities to outcomes and predict relative frequencies for related events.
- Conduct repeated single-step chance experiments and run simulations using digital tools, giving reasons for differences between predicted and observed results.

Assessment overview

The Year 7 Mathematics assessment course includes:

- Supervised written assessment tasks; and
- Problem-solving and Modelling Tasks.

Pathways

Year 7 Mathematics is the foundation of the Junior School Mathematics course. Progression through Year 7, 8 and 9 Mathematics will build on and extend the core skills of this subject. Students who achieve the prerequisites may apply to study Mathematics Extension in Year 9. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Mathematics subjects which continue through Year 11 and 12.

Year 8 Mathematics

Purpose

Through the study of Mathematics at Brisbane State High School, students will be provided with opportunities to:

- become confident, creative users and communicators of Mathematics;
- be able to investigate, represent and interpret situations in their personal and work lives and as active citizens;
- develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and be able to pose and solve problems and reason in Number and Algebra, Measurement and Geometry, and Statistics and Probability;
- recognise connections between the areas of Mathematics and other disciplines; and
- appreciate Mathematics as an accessible and enjoyable discipline to study.

Course outline

The Year 8 Mathematics course seeks to support students to continue to develop a solid foundation of knowledge of numeracy. Through the Australian Curriculum: Mathematics, the construction units of work is spiralling in nature and as such students will engage with strands on a number of occasions throughout the year at increasing levels of complexity.

Unit description (deep understanding)

Number

The Number strand develops ways of working with mental constructs that deal with correspondence, magnitude and order, for which operations and their properties can be defined. Numbers have wide ranging application and specific uses in counting, measuring and other means of quantifying situations and objects.

Algebra

The Algebra strand develops ways of using symbols and symbolic representations to think and reason about relationships in both mathematical and real-world contexts. It provides a means for manipulating mathematical objects, recognising patterns and structures, making connections, understanding properties of operations and the concept of equivalence, abstracting information, working with variables, solving equations and generalising number and operation facts and relationships.

Measurement

The Measurement strand develops ways of quantifying aspects of the human and physical world. Measures and units are defined and selected to be relevant and appropriate to the context. Measurement is used to answer questions, show results, demonstrate value, justify allocation of resources, evaluate performance, identify opportunities for improvement and manage results.

Space

The Space strand develops ways of visualising, representing and working with the location, direction, shape, placement, proximity and transformation of objects at macro, local and micro scales in natural and constructed worlds. This includes notions such as surface, region, boundary, curve, object, dimension, connectedness, symmetry, direction, congruence and similarity.

Statistics

The Statistics strand develops ways of collecting understanding and describing data and its distribution. Statistics provide a story, or means to support or question an argument, and enables exploratory data analysis that underpins decision-making and informed judgement.

Probability

The Probability strand develops ways of dealing with uncertainty and expectation, making predictions, and characterising the chance of events, or how likely events are to occur from both empirical and theoretical bases. It provides a means of considering, analysing and utilising the chance of events, and recognising random phenomena for which it is impossible to exactly determine the next observed outcome before it occurs.

Key skills

Students will be engaged in the following Numeracy Skills throughout the Year 8 Mathematics course.

- extend computation with combinations of the 4 operations with integers and positive rational numbers, recognise the relationship between fractions and their terminating or infinite recurring decimal expansions; they convert between fraction and decimal forms of rational numbers and locate them on the real number line
- extend the exponent laws to numerical calculations involving positive and zero exponents, and solve a broad range of practical problems, using mental methods, written algorithms and digital tools
- use mathematical modelling to solve problems in a broad range of contexts that involve ratios with 2 or more terms, percentage increase and decrease, proportions with decimal values, and rates in measurement contexts, and apply proportional reasoning
- manipulate linear and other algebraic expressions, recognise and model situations using linear relations and solve related equations using tales, graphs and algebra
- interpret and explain demonstrations and proofs of Pythagoras' theorem and investigate irrational numbers, their infinite non-recurring decimal expansion and their approximate location on the real number line
- select metric measurement units fit for purpose, convert between units, recognising the effects of different levels of measurement accuracy on the results of computations, and relate these to interval estimates for measurements in various contexts
- apply knowledge of the relationships between p and the features of circles to solve problems involving circumference and area and establish sets of congruency and similarity conditions for common shapes in the plane and create algorithms to test for these conditions, discuss examples and counter examples
- construct and locate objects with reference to three-dimensional coordinates using digital tools
- consider a variety of situations involving complementary and mutually exclusive events, combinations of 2 events; represent these using tables and diagrams, conducting simulations and calculating corresponding probabilities
- examine experimental and observational data and identify populations and samples with respect to context; investigate variation in summary statistics across samples of varying size and discuss their findings.

Assessment overview

The Year 8 Mathematics assessment course includes:

- Supervised written assessment tasks; and
- Problem-solving and Modelling Tasks.

Pathways

Students in Year 8 Mathematics continue to develop a strong foundation in the Junior School Mathematics course. Progression through Year 9 Mathematics will build on and extend the core skills of this subject. Students who achieve the prerequisites may apply to study Mathematics Extension in Year 9. The readiness criteria for Mathematics Extension is a minimum B in both criteria in Year 8 Mathematics or Year 8 Aspire Mathematics. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Mathematics subjects which continue through Year 11 and 12.

Year 9 Mathematics

Purpose

Through the study of Mathematics at Brisbane State High School, students will be provided with opportunities to:

- become confident, creative users and communicators of Mathematics;
- be able to investigate, represent and interpret situations in their personal and work lives and as active citizens;
- develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and be able to pose and solve problems and reason in Number and Algebra, Measurement and Geometry, and Statistics and Probability;
- recognise connections between the areas of Mathematics and other disciplines; and
- appreciate Mathematics as an accessible and enjoyable discipline to study.

Course outline

The Year 9 Mathematics course seeks to support students to develop a solid foundation of knowledge of numeracy. Through the Australian Curriculum: Mathematics, the construction units of work is spiralling in nature and as such students will engage with strands on a number of occasions throughout the year at increasing levels of complexity.

Unit description (deep understanding)

Number and Algebra

This unit focuses on developing Number and Algebra together, as each enriches the study of the other. Students apply number sense and strategies for counting and representing numbers. They explore the magnitude and properties of numbers. They apply a range of strategies for computation and understand the connections between operations. They recognise patterns and understand the concepts of variable and function. They build on their understanding of the number system to describe relationships and formulate generalisations. They recognise equivalence and solve equations and inequalities. They apply their number and algebra skills to conduct investigations, solve problems and communicate their reasoning.

Measurement and Geometry

This unit focuses on developing Measurement and Geometry 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 figu es in the plane and three-dimensional objects in space. They investigate properties and apply their understanding of them to define, compare and construct figu es and objects. They learn to develop geometric arguments. They make meaningful measurements of quantities, choosing appropriate metric units of measurement. They build an understanding of the connections between units and calculate derived measures such as area, speed and density.

Statistics and Probability

This unit focuses on initially developing Statistics and Probability in parallel and the curriculum then progressively builds the links between them. Students recognise and analyse data and draw inferences. They represent, summarise and interpret data and undertake purposeful investigations involving the collection and interpretation of data. They assess likelihood and assign probabilities using experimental and theoretical approaches. They develop an increasingly sophisticated ability to critically evaluate chance and data concepts and make reasoned judgements and decisions, as well as building skills to critically evaluate statistical information and develop intuitions about data.

Key skills

Students will be engaged in the following Numeracy Skills throughout the Year 9 Mathematics course.

- Solve problems involving direct proportion
- Explore the relationship between graphs and equations corresponding to simple rate problems
- Apply index laws to numerical expressions with integer indices
- Express numbers in scientific notatio
- Solve problems involving simple interest
- Extend and apply the index laws to variables, using positive integer indices and the zero index
- Apply the distributive law to the expansion of algebraic expressions, including binomials, and collect like terms where appropriate
- Find the distance between two points located on the Cartesian plane using a range of strategies, including graphing software
- Find the midpoint and gradient of a line segment (interval) on the Cartesian plane using a range of strategies, including graphing software
- Sketch linear graphs using the coordinates of two points and solve linear equations

- Graph simple non-linear relations with and without the use of digital technologies and solve simple related equations
- Calculate areas of composite shapes
- Calculate the surface area and volume of cylinders and solve related problems
- Solve problems involving the surface area and volume of right prisms
- Investigate very small and very large time scales and intervals
- Use the enlargement transformation to explain similarity and develop the conditions for triangles to be similar
- Solve problems using ratio and scale factors in similar figu es
- Investigate Pythagoras' Theorem and its application to solving simple problems involving right angled triangles
- Use similarity to investigate the constancy of the sine, cosine and tangent ratios for a given angle in right-angled triangles
- Apply trigonometry to solve right-angled triangle problems
- List all outcomes for two-step chance experiments, both with and without replacement using tree diagrams or arrays
- Assign probabilities to outcomes and determine probabilities for events
- Calculate relative frequencies from given or collected data to estimate probabilities of events involving 'and' or 'or'
- Investigate reports of surveys in digital media and elsewhere for information on how data were obtained to estimate population means and medians
- Identify everyday questions and issues involving at least one numerical and at least one categorical variable and collect data directly and from secondary sources
- Construct back-to-back stem-and-leaf plots and histograms and describe data, using terms including 'skewed', 'symmetric' and 'bi modal'
- Compare data displays using mean, median and range to describe and interpret numerical data sets in terms of location (centre) and spread

Assessment overview

The Year 9 Mathematics assessment course includes:

- Supervised written assessment tasks; and
- Problem-solving and Modelling Tasks.

Pathways

Year 9 Mathematics is the completion of the Junior School Mathematics course. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Mathematics subjects which continue through Year 11 and 12.

Year 9 Mathematics Extension

Purpose

Mathematics Extension is an enrichment course that provides students with an opportunity to pursue and develop their interests and skills in the mathematical strands of: Number and Algebra, Measurement and Geometry, and Statistics and Probability.

Students will learn and be assessed on Year 9 National Curriculum: Mathematics. Learning is paced so that students are exposed to true enrichment activities aligned to current topics. These enrichment activities provide significant challenge, and students are supported to implement a variety of strategies to engage with this work. Students regularly reflect on their learning and problem-solving strategies.

The readiness criteria for Mathematics Extension is a minimum B in both criteria in Year 8 Mathematics or Year 8 Aspire Mathematics.

Students selecting this course should be intrinsically motivated, excited and ready for challenge in their mathematical thinking.

The learning opportunities in the Mathematics Extension course includes, where possible: greater choice; more opportunity for both independence and collaboration; and encouragement and support to engage in externally offe ed extension opportunities.

Through the study of Mathematics Extension at State High, students will be provided with opportunities to:

- become confident, creative users and communicators of Mathematics;
- be able to investigate, represent and interpret situations in their personal and work lives and as active citizens;
- develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes and be able to pose and solve problems and reason in Number and Algebra, Measurement and Geometry, and Statistics and Probability;
- recognise connections between the areas of Mathematics and other disciplines; and
- appreciate Mathematics as an accessible and enjoyable discipline to study.

Course outline

The Year 9 Mathematics Extension course seeks to support students to develop a solid foundation of knowledge of numeracy. Through the Australian Curriculum: Mathematics, the construction units of work is spiralling in nature and as such, students will engage with strands on a number of occasions throughout the year at increasing levels of complexity.

Unit description (Deep Understanding)

Number and Algebra

This unit focuses on developing Number and Algebra together, as each enriches the study of the other. Students apply number sense and strategies for counting and representing numbers. They explore the magnitude and properties of numbers. They apply a range of strategies for computation and understand the connections between operations. They recognise patterns and understand the concepts of variable and function. They build on their understanding of the number system to describe relationships and formulate generalisations. They recognise equivalence and solve equations and inequalities. They apply their number and algebra skills to conduct investigations, solve problems and communicate their reasoning.

Measurement and Geometry

This unit focuses on developing Measurement and Geometry 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 figu es in the plane and three-dimensional objects in space. They investigate properties and apply their understanding of them to define, compare and construct figu es and objects. They learn to develop geometric arguments. They make meaningful measurements of quantities, choosing appropriate metric units of measurement. They build an understanding of the connections between units and calculate derived measures such as area, speed and density.

Statistics and Probability

This unit focuses on initially developing Statistics and Probability in parallel and the curriculum then progressively builds the links between them. Students recognise and analyse data and draw inferences. They represent, summarise and interpret data and undertake purposeful investigations involving the collection and interpretation of data. They assess likelihood and assign probabilities using experimental and theoretical approaches. They develop an increasingly sophisticated ability to critically evaluate chance and data concepts and make reasoned judgements and decisions, as well as building skills to critically evaluate statistical information and develop intuitions about data.

Key skills

Students will be engaged in the following Numeracy Skills throughout the Year 9 Mathematics Extension course.

- Solve problems involving direct proportion
- Explore the relationship between graphs and equations corresponding to simple rate problems
- Apply index laws to numerical expressions with integer indices
- Express numbers in scientific notatio
- Solve problems involving simple interest
- Extend and apply the index laws to variables, using positive integer indices and the zero index
- Apply the distributive law to the expansion of algebraic expressions, including binomials, and collect like terms where appropriate
- Find the distance between two points located on the Cartesian plane using a range of strategies, including graphing software
- Find the midpoint and gradient of a line segment (interval) on the Cartesian plane using a range of strategies, including graphing software
- Sketch linear graphs using the coordinates of two points and solve linear equations
- Graph simple non-linear relations with and without the use of digital technologies and solve simple related equations
- Calculate areas of composite shapes
- Calculate the surface area and volume of cylinders and solve related problems
- Solve problems involving the surface area and volume of right prisms
- Investigate very small and very large time scales and intervals
- Use the enlargement transformation to explain similarity and develop the conditions for triangles to be similar
- Solve problems using ratio and scale factors in similar figu es
- Investigate Pythagoras' Theorem and its application to solving simple problems involving right angled triangles
- Use similarity to investigate the constancy of the sine, cosine and tangent ratios for a given angle in right-angled triangles
- Apply trigonometry to solve right-angled triangle problems
- List all outcomes for two-step chance experiments, both with and without replacement using tree diagrams or arrays
- Assign probabilities to outcomes and determine probabilities for events
- Calculate relative frequencies from given or collected data to estimate probabilities of events involving 'and' or 'or'
- Investigate reports of surveys in digital media and elsewhere for information on how data were obtained to estimate population means and medians
- Identify everyday questions and issues involving at least one numerical and at least one categorical variable, and collect data directly and from secondary sources
- Construct back-to-back stem-and-leaf plots and histograms and describe data, using terms including 'skewed', 'symmetric' and 'bi modal'
- Compare data displays using mean, median and range to describe and interpret numerical data sets in terms of location (centre) and spread

Assessment overview

The Year 9 Mathematics Extension assessment course includes:

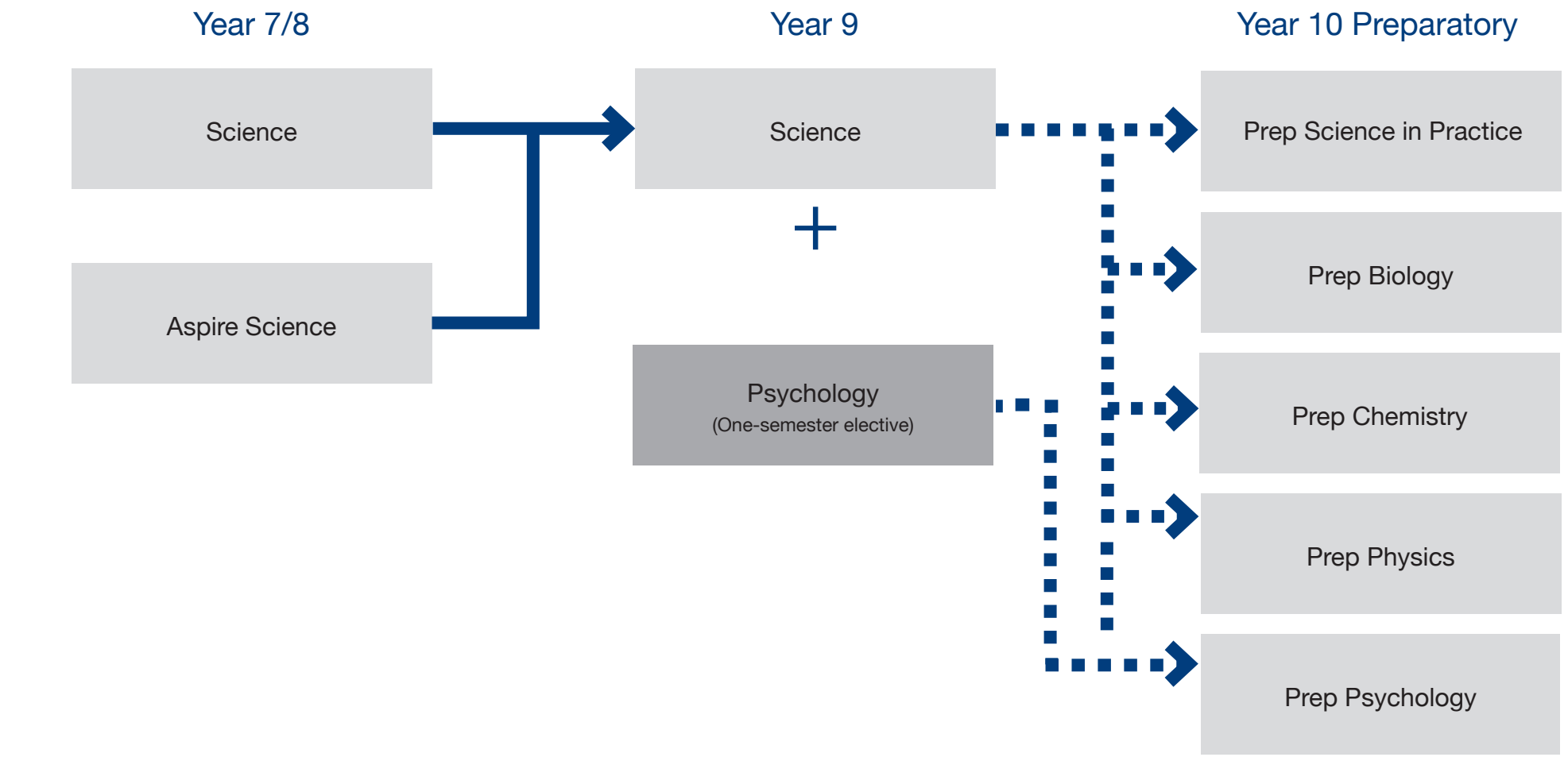
- Supervised written assessment tasks; and
- Problem-solving and Modelling Tasks.

Pathways

Year 9 Mathematics Extension is the completion of the Junior School Mathematics course. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Mathematics subjects which continue through Year 11 and 12.

Science

Learning area: Science



Year 7 Science

Purpose

The study of Science provides students with opportunities to develop:

- an interest in Science as a means of expanding their curiosity and willingness to explore, ask questions about and speculate on the changing world in which they live;
- an understanding of the nature of scientifi inquiry and the ability to use a range of scientifi inquiry methods, including questioning, planning and conducting experiments and investigations based on ethical principles, collecting and analysing data, evaluating results, and drawing critical, evidence-based conclusions;
- an ability to communicate scientific understanding and findings to a range of audiences, to justify ideas on the basis of evidence and to evaluate and debate scientific arguments and claims; an
- an ability to solve problems and make informed, evidence-based decisions about current and future applications of Science while taking into account ethical and social implications of decisions.

Course outline

Through the Australian Curriculum: Science, students develop a solid foundation of knowledge of the Biological, Chemical, Physical, Earth and Space Sciences. They have opportunities to select and integrate the scientific knowledge and methods needed to explain and predict phenomena, to apply that understanding to new situations and events, and to appreciate the dynamic nature of science knowledge

Unit description (deep understanding)

Biological Sciences

This unit focuses on understanding that 'systems of classification a e b ased o n shared physical characteristics' (Carl Linnaeus) and develop classification t ools. S tudents w ill u se models to represent matter and energy flow nd make predictions. Students will describe the interactions between organisms via food chains and food webs and consider how human activity can affect these interactions.

Chemical Sciences

Students develop an understanding of the composition and behaviour of substances. They classify substances based on their properties, such as solids, liquids and gases; or their composition, such as elements, compounds and mixtures. They explore physical changes, such as changes of state.

Physical Sciences

Students develop an understanding of forces and motion. They investigate how an object's motion is influenced by a range of forces, such as frictional and, magnetic, and learn how to represent and predict these interactions.

Earth and Space Sciences

Students explore how changes on Earth and the seasons relate to Earth's rotation and its revolution around the sun.

Key skills

Students will be engaged in the following Science Understanding and Skills throughout the Year 7 Science course.

- Explain how biological diversity is ordered and organised.
- Represent flows of matter and energy in ecosystems and predict the effects of environmental changes.
- Model cycles in the Earth-sun-moon system and explain the effects of these cycles on Earth phenomena.
- Represent and explain the effects of forces acting on objects.
- Use particle theory to explain the physical properties of substances and develop processes that separate mixtures.
- Identify the factors that can influence development of and lead to changes in scientific knowledge.
- Explain how scientific responses are developed
- and can impact society.
- Explain the role of science communication in shaping viewpoints, policies and regulations.
- Plan and conduct safe, reproducible investigations to test relationships and aspects of scientific models.
- Identify potential ethical issues and intercultural considerations required for field locations or use of secondary data.
- Use equipment to generate and record data.

Assessment overview

The Year 7 Science assessment course includes:

- Supervised written assessment tasks;
- Practical experimental reports; and
- Multimodal presentations.

Pathways

Year 7 Science is the foundation of the Junior School Science course. Progression through Year 7, 8 and 9 Science will build on and extend the core skills of this subject. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Science subjects which continue through Year 11 and 12.

Year 8 Science

Purpose

The study of Science provides students with opportunities to develop:

- an interest in Science as a means of expanding their curiosity and willingness to explore, ask questions about and speculate on the changing world in which they live;
- an understanding of the nature of scientifi inquiry and the ability to use a range of scientifi inquiry methods, including questioning, planning and conducting experiments and investigations based on ethical principles, collecting and analysing data, evaluating results, and drawing critical, evidence-based conclusions;
- an ability to communicate scientific understanding and findings to a range of audiences, to justify ideas on the basis of evidence, and to evaluate and debate scientific arguments and claims; an
- an ability to solve problems and make informed, evidence-based decisions about current and future applications of Science while taking into account ethical and social implications of decisions.

Course outline

Through the Australian Curriculum: Science, students develop a solid foundation of knowledge of the Biological, Chemical, Physical, Earth and Space Sciences. They have opportunities to select and integrate the scientific knowledge and methods needed to explain and predict phenomena, to apply that understanding to new situations and events, and to appreciate the dynamic nature of science knowledge.

Unit description (deep understanding)

Earth and Space Sciences

This unit focuses on engaging students in the investigation of the enduring understanding that 'we live on a planet that records its own history' (Knoll, 2003). Through the consideration of minerals, fossils and sedimentary, igneous and metamorphic rocks, students will investigate the dynamic nature of the rock cycle and the processes that occur within Earth over a variety of timescales.

Biological Sciences

This unit focuses on engaging students in the investigation of cells as the building blocks of all living things. It also challenges students to consider the role of technology in the growing scientific understanding of cells. Through the consideration of cells, students will investigate how the basic units of living things grow, are repaired, reproduce and carry out specialised functions.

Chemical Sciences

This unit focuses on engaging students in the investigation of the statement that 'the most unmistakable chemical transformation is that of a matter's state' (Natalie Angier, 2007). Through the engagement in a range of laboratory-based experiments, students will explore changes in matter at a particle level. They will describe the diffe ence between elements, compounds and mixtures, and distinguish between chemical and physical changes.

Physical Sciences

This unit focuses on engaging students in the investigation of energy. 'Energy cannot be created nor destroyed, merely converted' (Julius Mayer, 1842). Students will explore how diffe ent forms of energy cause changes within simple systems and investigate how they can be informed consumers of energy.

Key skills

Students will be engaged in the following Science Inquiry Skills throughout the Year 8 Science course.

- explain the role of specialised cell structures and organelles in cellular function
- analyse the relationship between structure and function at organ and body system levels.
- apply an understanding of the theory of plate tectonics to explain patterns of change in the geosphere.
- explain how the properties of rocks relate to their formation and influence their use. compare different forms of energy and represent transfer and transformation of energy in simple systems.
- classify and represent different types of matter and distinguish between physical and chemical change.
- analyse how different factors influence development of and lead to changes in scientific knowledge.
- analyse the key considerations that inform scientific responses and how these responses impact society.
- analyse the importance of science communication in shaping viewpoints, policies and regulations.
- plan and conduct safe, reproducible investigations to test relationships and explore models.
- describe potential ethical issues and intercultural considerations needed for specific field locations or use of secondary data.
- select and use equipment to generate and record data with precision.
- select and construct appropriate representations to organise and process data and information.
- analyse data and information to describe patterns, trends and relationships and identify anomalies.
- identify assumptions and sources of error in methods and analyse conclusions andclaims with reference to conflicting evidence and unanswered questions.
- construct evidence-based arguments to support conclusions and evaluate claims.
- select and use language and text features appropriately for their purpose when communicating their ideas, findings and arguments to specific audiences.

Assessment overview

TheYear 8 Science assessment course includes:

- Supervised written assessment tasks;
- Practical experimental reports; and
- Written research report.

Pathways

Students in Year 8 Science continue to develop a strong foundation in the Junior School Science course. Progression through Year 9 Science will build on and extend the core skills of this subject. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Science subjects which continue through Year 11 and 12.

Year 9 Science

Purpose

The study of Science provides students with opportunities to develop:

- an interest in Science as a means of expanding their curiosity and willingness to explore, ask questions about and speculate on the changing world in which they live;
- an understanding of the nature of scientific inquiry and the ability to use a range of scientific inquiry methods, including questioning, planning and conducting experiments and investigations based on ethical principles, collecting and analysing data, evaluating results, and drawing critical, evidence-based conclusions;
- an ability to communicate scientific understanding and findings to a range of audiences, to justify ideas on the basis of evidence, and to evaluate and debate scientific arguments and claims; and
- an ability to solve problems and make informed, evidence-based decisions about current and future applications of Science while taking into account ethical and social implications of decisions.

Course outline

Through the Australian Curriculum: Science, students develop a solid foundation of knowledge of the Biological, Chemical, Physical, Earth and Space Sciences. They have opportunities to select and integrate the scientific knowledge and methods needed to explain and predict phenomena, to apply that understanding to new situations and events, and to appreciate the dynamic nature of science knowledge.

Unit description (deep understanding)

Chemical Sciences

This unit focuses on engaging students in the investigation of chemical reactions. Through the investigation of both non-living and living systems, students will develop an understanding of chemical reactions and the energy transformations that occur because of them.

Physical Sciences

This unit focuses on engaging students in the investigation of how forms of energy can be transferred in a variety of ways through different mediums and can be explained using wave and particle models. Through the investigation of heat and electric circuits, students will develop a greater understanding of factors that affect the transfer of energy.

Biological Sciences – Human Anatomy and Physiology

This unit focuses on engaging students in the investigation of the human body as a network of coordinated and interdependent internal systems. Students will develop a greater understanding of the processes that maintain dynamic equilibrium at all organisational levels and in response to the changing environment to ensure survival.

Key skills

Students will be engaged in the following Science Inquiry Skills throughout the Year 9 Science course.

- Formulate experimental questions and hypotheses
- Use investigation methods including field work and laboratory experimentation
- Use appropriate equipment to systematically and accurately collect and record data
- Analyse patterns and trends in data
- Describe relationships between variables and identify inconsistencies
- Draw conclusions that are consistent with evidence
- Evaluate conclusions
- Identify sources of uncertainty and possible alternative explanations
- Describe ways of improving the quality of data
- Critically analyse the validity of information in primary and secondary sources
- Communicate ideas, findings and solutions using scientific language and representations

Assessment overview

The Year 9 Science assessment course includes:

- Supervised written assessment tasks;
- Written research report; and
- Practical experimental report.

Pathways

Year 9 Science is the completion of the Junior School Science course. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Science subjects which continue through Year 11 and 12.

Year 9 Psychology

Purpose

Through the study of Psychology, students will be provided with opportunities to develop:

- an understanding of the theories of Psychology;
- an appreciation for how the brain works and impacts human behaviours;
- an understanding that psychological knowledge has developed over time and how this knowledge is shared in a variety of contexts and is informed by social, cultural and ethical considerations; and
- an understanding of how social, cultural and ethical considerations have shaped the study and practice of Psychology.

Course outline

The Year 9 Psychology course provides an opportunity for students to develop a solid foundation in psychological research and understanding. Throughout the course, students will conduct a variety of investigations involving collection and analysis of data and the interpretation of evidence.

Unit description (deep understanding)

Social Psychology

This topic investigates the influence of others on individual behaviour through studies of conformity (Asch),
obedience (Milgram), and power (Zimbardo). Students explore how these elements shape actions and attitudes,
enhancing their understanding of social psychology.

Behavioural Psychology

This topic covers behavioural psychology, focusing on how learning occurs in animals and humans through methods like trial and error, imprinting, and insight. It delves into learning theories such as operant conditioning and social learning theory, and examines how primary and secondary socialisation influence behaviours lik conformity and obedience.

Neuropsychology

In this topic, students explore the relationship between brain structures and mental processes. Students learn about organisation of the nervous system and the localisation of brain function, and gain an understanding of how this knowledge has been gained through case studies of brain damage and modern neuroimaging techniques.

Cognitive Psychology

This topic in cognitive psychology centres on understanding memory through various models such as the information processing model, multistore model, and levels of processing model. Students engage in experiments to explore their own memory capabilities and conduct independent research to collect, analyse, and interpret data.

Forensic Psychology

This topic on forensic psychology extends cognitive psychology by examining memory's fallibility within the context of crime. Students explore the reliability of eyewitness testimonies and investigate how factors like leading questions can influence memory,
enhancing their understanding of psychology in legal settings.

Key skills

Students will be engaged in the following Science Inquiry Skills throughout the Year 9 Psychology course.

- Describe ideas and finding
- Apply their understanding of scientific concepts, theories and models and their limitations
- Analyse data and interpret evidence
- Evaluate conclusions and processes

Assessment overview

The Year 9 Psychology assessment course includes:

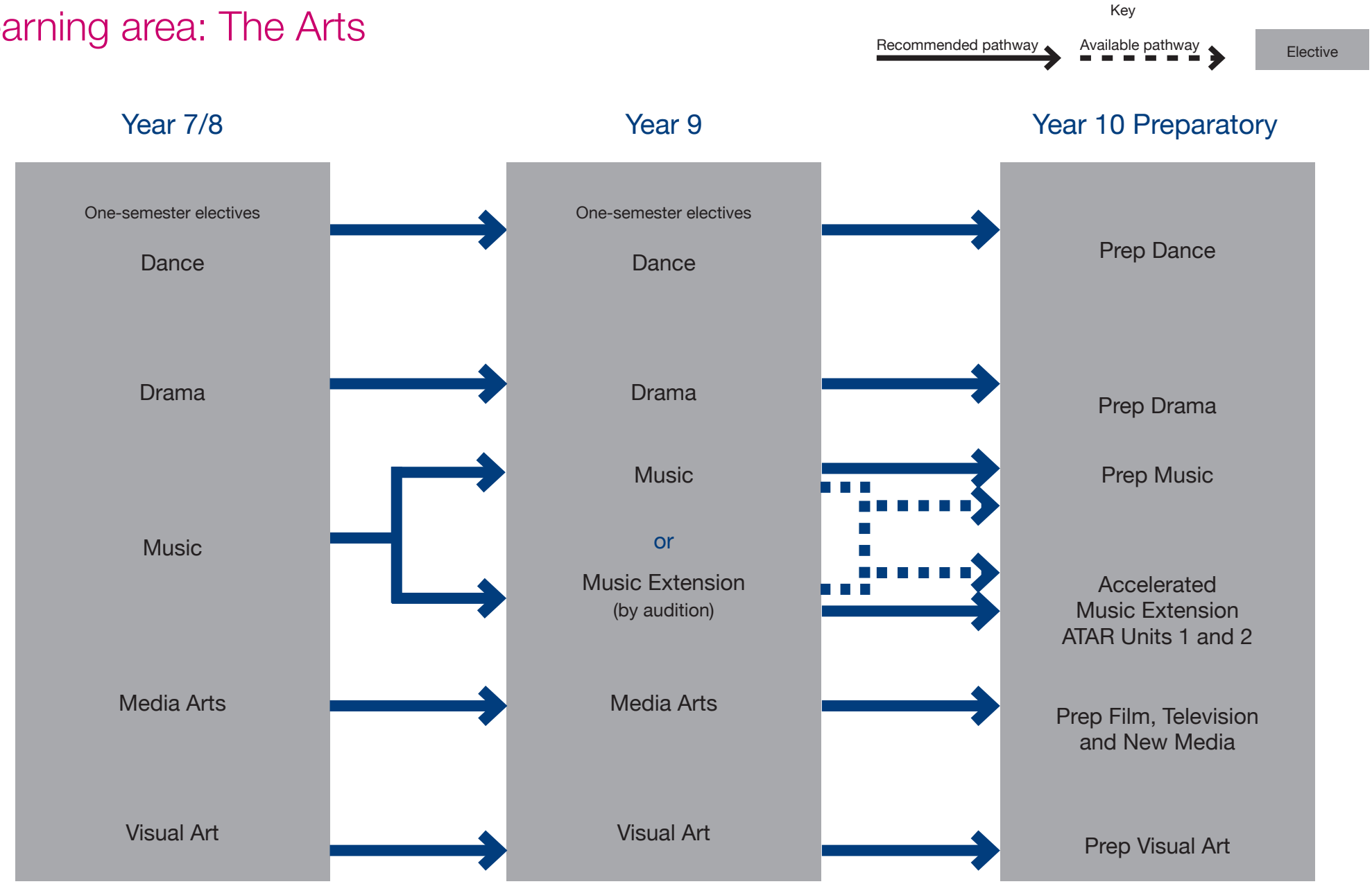
- Supervised written exam; and
- Written student experiment report.

Pathways

Year 9 Psychology course develops the knowledge and skills required for further study in the field of Psychology. In Year 10, students may choose to study Preparatory Psychology, which continues through Year 11 and 12.

The Arts

Learning area: The Arts



Purpose (Year 7 and 8)

The arts are as old as humanity. They are part of every culture and central to the diverse and continuing cultures of First Nations Australians. Through the arts, people share stories, ideas, knowledge and understanding. The arts engage our senses and give us ways to imagine, celebrate, communicate and challenge ways of knowing, being, doing and becoming.

Participating in quality arts experiences and practices enriches our social and emotional wellbeing. It fosters development of our imagination and enables us to reach our creative and intellectual potential.

Rich in tradition, the arts play a major role in the development and expressions of diverse cultures and communities, locally, nationally and globally. The exploration of cultures and histories through Arts learning strengthens understanding of Australia's cultural diversity and develops critical intercultural understandings to inform decision-making and aesthetic choices. Students communicate meaningful ideas in conventional and innovative arts forms. They use arts knowledge, practice and understandings to learn and make meaning as artists and as audiences, taking opportunities to engage with arts organisations, creative industries and arts professionals.

The arts are core to the development of creative, confident, compassionate and resilient individuals who can think and reflect critically, celebrate and challenge ideas, people and events, and work towards making a difference in sustaining and reimagining their own and their communities' futures.

The processes and practices of arts, such as project-based learning and creative problem-solving, develop transferable 21st century skills that are highly valued in many areas of employment and essential to engagement in a complex and rapidly-changing world. Organisations increasingly seek employees who demonstrate work-related creativity, innovative thinking and diversity.

The curriculum examines past, current and emerging arts practices in each art form across a range of cultures and places. At State High, students choose from the following arts strands:

- Dance
- Drama
- Media Arts
- Music
- Visual Art

Each subject focuses on its own practices, terminology and unique ways of looking at the world.

In each subject, students explore and respond, develop practices and skills, create and make, present and perform.

In Dance, students use the body to communicate and express meaning through purposeful movement. Dance practice integrates choreography, performance, and responding to dance and dance making. Students experience and explore dance created and performed across diverse contexts, styles and forms, and build understanding of how dance uses the body and movement to communicate ideas and meaning.

In Drama, students create, perform and respond to drama as artists and audiences. They learn to use, manage and manipulate the elements and conventions of drama across a range of dramatic forms and styles. Students learn in, through and about drama as they create dramatic action and communicate dramatic meaning.

In Media Arts, students use images, sound, text, interactive elements and technologies to creatively explore, produce and interpret stories about people, ideas and the world around them. They explore the diverse cultural, social and organisational influences on media practices, and draw on this understanding when producing and responding to media arts works.

In Music, students listen to, compose and perform music from a diverse range of styles, cultures, traditions and contexts. They create, organise, manipulate and share sounds in time and space, and critically analyse music. Music practices are aurally based and focus on developing and applying knowledge and skills through sustained musical engagement and experiences.

In Visual Art, students learn in, through and about visual arts practices, including the fields of art, craft and design. They experience and explore visual artworks created by artists working in diverse contexts, styles and forms, and build understanding of the significance and impact of visual arts practice and culture for themselves and local and global communities.

Course Outlines (Year 7)

Dance: This unit focuses on storytelling and using students' bodies to communicate meaning. They will participate in contemporary and jazz dance technique lessons and learn a teacher-devised contemporary dance using *The Arrival* by Shaun Tan as the stimulus. Students will engage in choreographic device workshops, teaching them skills on how to choreograph movement sequences and short dance works. Students will respond to a range of written and visual texts, using dance to explore their explicit and implicit meanings. The subject will also involve students learning how to analyse, interpret and evaluate meaning and intent through dance.

Drama: This unit focuses on students creating characters and roles and developing the relationships between those roles through the study of improvisational skills using a variety of stimuli to create them. The unit then goes on to further develop these skills enhanced by other dramatic elements such as dramatic tension. Using the play *The Witches* by Roald Dahl, students create a polished, scripted performance work for an audience of primary school students. The unit provides students with the opportunity to experiment with a range of dramatic forms, such as puppetry and devising characters as well as viewing live theatre and writing an analytical response.

Media Arts: In this unit, students explore how the setting and characters in a story can influence its meaning. They learn about archetypes—common character types found in many stories—and study the basics of visual and film language. Through watching and analysing animated films, students discover how these archetypes work in storytelling. Using this knowledge, students create a portfolio of animated work. This includes experimenting with different animation styles such as 2D digital animation, Lego walk cycles, and traditional stop motion. They also develop sound design skills using microphones and editing software. All of these elements come together to showcase their understanding of storytelling, animation techniques, and audio production.

Music: This unit focuses on the creation of mood and character through music. Students develop fundamental knowledge of what, how and why musical elements are used to express ideas through music. The unit explores mood and character through a range of musical genres and gives students the opportunity to develop their musical skills through performing, composing and analysing music that promotes storytelling. They will participate in group and individual performances and use their iPads and apps to create their own character compositions. Students will learn techniques of analysis and respond to live performances from local artists. The ability to play an instrument is not a prerequisite for a student to participate in this course. Foundation skills will be developed as part of the curriculum.

Visual Art: This unit focuses on Art and Storytelling and how human beings are compelled to create art to communicate ideas to explain events and feelings about the world. Art and Storytelling introduces students to a variety of artworks, using visual language conventions to make engaging, thought-provoking artworks. Students will explore the four key design elements (line, tone, colour and texture), media, techniques and processes commonly found in artworks and combine these to create their own artworks in relation to their and others' cultural identities. Students will analyse artworks from a variety of time periods and cultures and compare how diffe ent media techniques and visual language conventions communicate diverse meanings. The subject will also involve students in the creative production of 2D, 3D and 4D artworks individually and in small groups.

Key skills

The Arts aims to develop students':

- creativity, critical thinking, aesthetic knowledge and understanding about arts practices
- knowledge and skills to imagine, observe, express, respond to and communicate ideas and perspectives in meaningful ways
- use of available resources and materials including digital tools
- empathy for multiple perspectives and understanding of personal, local, regional, national and global histories and traditions through the arts
- engagement with the diverse and continuing cultures, arts works and practices of First Nations Australians
- understanding of local, regional, national and global cultures, and their arts histories and traditions, through engaging with the worlds of artists, arts works, audiences and arts professions.

Assessment overview

Students will develop a folio of work that includes both making and responding tasks. Their assessment will include experimental and resolved works of art as well as written responding tasks.

'Making' includes learning about and using knowledge, skills, techniques, processes, materials and technologies to explore arts practices and make artworks that communicate ideas and intentions.

'Responding' includes exploring, responding to, analysing, interpreting and evaluating artworks.

Pathways

Students can choose to continue studying in the same Arts discipline (Dance, Drama, Media Arts, Music, Visual Art) in Year 8, or they may choose to explore a diffe ent strand. All of The Arts strands are offe ed from Year 7 to Year 12, and in the Senior phase of learning, **all of The Arts courses contribute to an ATAR pathway.**

Course Outlines (Year 8)

Dance: In this unit, students will learn how to convey a story and a character in the genre of Hip Hop dance, through a teacher-devised performance. They will extend on their knowledge of contemporary dance by exploring how to use a variety of stimulus and choreographic methods informed by established international choreographers. This practical learning will compliment students analytical processes in which they unpack choreographers deliberate choices to communicate intent.

Drama: This unit focuses on telling stories, through developing students' skills of building character and creating tension. The students create dramatic meaning through scripted work using the script *Stories in the Dark* by Deborah Oswald. Students are introduced to physical storytelling conventions and magic realism through an engaging and immersive process drama experience. They devise and perform a ritual for an audience of their peers and devise scripted scenes that explore myths and legends. Students also view and respond to a recorded or live performance.

Media Arts: In this unit, students learn the key elements of non-fiction filmmaking by studying and creating documentary-style films. They analyse documentary texts to understand the techniques used and how these reflect the filmmaker's personal perspective and message. Using these insights, students produce a short documentary that features a member of the State High community. Following this, students explore fictionalised documentary storytelling as seen in television. They apply documentary techniques to a mockumentary format by planning and creating their own episode inspired by Little Lunch. Students learn how to design and plan a television episode, and use their iPads and apps to film, record sound, edit, and share their work.

Music: This unit focuses on the ideas of place and identity through music. Students develop fundamental knowledge of what, how and why musical elements are used to express ideas through music. The unit explores place and identity through a range of musical genres and gives students the opportunity to develop their musical skills through performing, composing and analysing music that promotes identity. They will participate in group and individual performances and use technology and music software to create high quality notation and recordings of their own compositions. Students will learn techniques of analysis and respond to live performances from local artists, such as at the Queensland Conservatorium. The ability to play an instrument is a prerequisite for a student to participate in this course. Foundation skills will be developed as part of the curriculum.

Visual Art: This unit focuses on Place, Space and Identity and will introduce students to a variety of artworks, using visual language conventions to make engaging, thought-provoking artworks. Students will explore five key design elements (space, shape, composition, focal point and colour), media, techniques and processes commonly found in artworks and combine these to create their own artworks in relation to their own collective and personal identities. Students will analyse artworks from a variety of time periods and cultures and compare how diffe ent media techniques and visual language conventions communicate diverse meanings. The subject will also involve students in the creative production of 2D, 3D artworks individually and in small groups.

Key skills

The Arts aims to develop students':

- creativity, critical thinking, aesthetic knowledge and understanding about arts practices
- knowledge and skills to imagine, observe, express, respond to and communicate ideas and perspectives in meaningful ways
- use of available resources and materials including digital tools
- empathy for multiple perspectives and understanding of personal, local, regional, national and global histories and traditions through the arts
- engagement with the diverse and continuing cultures, arts works and practices of First Nations Australians
- understanding of local, regional, national and global cultures, and their arts histories and traditions, through engaging with the worlds of artists, arts works, audiences and arts professions.

Assessment overview

Students will develop a folio of work that includes both making and responding tasks. Their assessment will include experimental and resolved works of art as well as written responding tasks.

'Making' includes learning about and using knowledge, skills, techniques, processes, materials and technologies to explore arts practices and make artworks that communicate ideas and intentions.

'Responding' includes exploring, responding to, analysing, interpreting and evaluating artworks.

Pathways

Students can choose to continue studying in the same Arts discipline (Dance, Drama, Media Arts, Music, Visual Art) in Year 9, or they may choose to try a diffe ent strand. **All of The Arts strands are offered from Year 7 to Year 12, and in the Senior phase of learning, all of The Arts courses contribute to an ATAR pathway.**

Purpose (Year 9)

The arts are as old as humanity. They are part of every culture and central to the diverse and continuing cultures of First Nations Australians. Through the arts, people share stories, ideas, knowledge and understanding. The arts engage our senses and give us ways to imagine, celebrate, communicate and challenge ways of knowing, being, doing and becoming.

Participating in quality arts experiences and practices enriches our social and emotional wellbeing. It fosters development of our imagination and enables us to reach our creative and intellectual potential.

Rich in tradition, the arts play a major role in the development and expressions of diverse cultures and communities, locally, nationally and globally. The exploration of cultures and histories through Arts learning strengthens understanding of Australia's cultural diversity and develops critical intercultural understandings to inform decision-making and aesthetic choices. Students communicate meaningful ideas in conventional and innovative arts forms. They use arts knowledge, practice and understandings to learn and make meaning as artists and as audiences, taking opportunities to engage with arts organisations, creative industries and arts professionals.

The arts are core to the development of creative, confident, compassionate and resilient individuals who can think and reflect critically, celebrate and challenge ideas, people and events, and work towards making a diffe ence in sustaining and reimagining their own and their communities' futures.

The processes and practices of arts, such as project-based learning and creative problem-solving, develop transferable 21st century skills that are highly valued in many areas of employment and essential to engagement in a complex and rapidly-changing world. Organisations increasingly seek employees who demonstrate work-related creativity, innovative thinking and diversity.

The curriculum examines past, current and emerging arts practices in each art form across a range of cultures and places. At State High, students choose from the following arts strands:

- Dance
- Drama
- Media Arts
- Music
- Visual Art

Each subject focuses on its own practices, terminology and unique ways of looking at the world.

In each subject, students explore and respond, develop practices and skills, create and make, present and perform.

In Dance, students use high-order thinking to gather information about the world around them and make decisions on how to use the body to communicate and express meaning through movement. Dance integrates choreography, making performance, and responding. It teaches students to be analytical thinkers when responding to their own or past and present work.

In Drama, students explore and depict real and fictional worlds through use of interpretive and evaluative skills, elements of drama and skills of acting to make meaning as performers and audience. They create, rehearse, perform and respond to drama.

In Media Arts, students use communications technologies to creatively explore, make and interpret stories about people, ideas and the world around them. They engage their senses, imagination and intellect through media artworks that respond to diverse cultural, social and organisational influences on communications practices today. Students focus on persuasion and manipulation techniques found in advertising, and storytelling techniques used in music videos.

In Music, students listen to, compose and perform music from a diverse range of styles, traditions and contexts. They create, shape and share sounds in time and space and critically analyse music. Music practice is aurally based and focuses on acquiring and using knowledge, understanding and skills about music and musicians.

In Visual Art, students experience and explore the concepts of artists, artworks, world and audience. Students learn in, through and about visual art practices, including the fields of art, craft and design. Students develop practical skills and critical thinking which inform their work as artists and audience.

Course Outlines (Year 9)

Dance: This unit focuses on the purpose of dance in diffe ent cultural and historical contexts. Through guest choreographers, students will learn and perform a Bollywood routine, emphasising the technical and expressive skills significant to this genre. Informed by an exploration into First Nations dance and cultural practices, students create their own choreography exploring a connection to place and people, communicating a personal viewpoint. Students extend their knowledge of creating Dance by analysing, interpreting and evaluating the choices of a self-chosen choreographer to view the work of and respond to.

Drama: This unit focuses on developing students' skills as a performer and understanding how meaning is created through the use of the dramatic languages to achieve specific purpose. These elements are explored through heightened performance styles of melodrama and magic realism. Students explore stock character types and narrative structures, and they will perform scripted text for a live audience of primary school students. Students will analyse, interpret and evaluate while exploring meaning and purpose as an audience member viewing a live performance. Students will study design and meaningful use of production elements to enhance communication of meaning and entertainment value for audiences. The unit culminates in a presentation of their own interpretation, designing, staging and portrayal of a specific character and situation from *The Land Mine Is Me*.

Media Arts: This course includes two main units. In the first unit, students explore the world of advertising by investigating both traditional and modern forms. They learn how persuasive techniques are used to influence consumers and examine how Australian products and identities are represented and targeted to specific audiences. Using this knowledge, students create an audiovisual advertisement designed for a particular audience and commercial goal. In the second unit, students are introduced to the basics of DSLR filmmaking. They build their skills by recreating a scene from a selected film, carefully matching camera framing, lighting, and visual design (mise en scène). Students then focus on editing by creating a film trailer from a provided source. Using Adobe Premiere Pro, they learn how to shape and influence audience reactions through editing techniques and storytelling.

Music: This unit focuses on the development of performing, composing and analytical skills through the study of music for 'Video Games and Film'. In particular, students will investigate how composers have used the musical elements to convey character, plot and mood through pieces composed for games (such as Legend of Zelda and Mario Kart) and film compositions (Hans Zimmer and John Williams).

Students will also engage with music technology and theoretical componants to compose pieces within these genres and use DAW's (Digital Audio Workstations) to realise their musical ideas. They will participate in group and individual performances and have the opportunity to hone their skills through performance workshops with visiting artists. This subject focuses on developing students' industry proficiency, creative and critical thinking skills through the inquiry question: "How does music tell a story?"

Year 9 Accelerated Extension: This unit aims to promote innovation and creativity though performance, composition and musicology. Under the banner of 'Big Hits, students explore a variety of musical forms and genres to learn how composers have revolutionised communicating meaning through music. The program aims to facilitate opportunities for project-based learning, allowing students scope to deepen their knowledge, skills and areas of their specific musical interest. The program covers musical hits throughout history from the Classical and Romantic eras to Music Theatre and music for the screen. Covering all outcomes of the Year 9 and 10 curriculum in one semester, students will refine their skills to learn how composers have used the musical elements to communicate intent and meaning. They will participate in performance and composition workshops with visiting musicians, engage with music technology and analyse the use of compositional devices and music elements at a deeper level.

Students seeking to enrol in the Junior Music Extension program are required to submit an audition video and undertake a survey and aural exam. Requirements include demonstration of performance capability, theory and musicianship skills.

Note: Year 9 Accelerated Music enables students to experience Year 10 Music in preparation for embarking on General Senior Music Units 1 and 2 in Year 10 Accelerated Music. Assessment for Year 9 Music Extension, therefore, follows Senior Music criteria and outcomes, similar to those experienced in Senior courses, including:

1. Performance and Statement
2. Examination – Extended Response
3. Project – Composition and Musicology (research).

Visual Art: The focus on art and the environment explores the tension between the built environment and the natural world. Students engage with contemporary art practice and work across a range of mediums which could include printmaking, painting, drawing and ceramics. Drawing skills underpin studio practice and time is spent developing both observational and expressive drawing.

Key skills

The Arts aims to develop students':

- creativity, critical thinking, aesthetic knowledge and understanding about arts practices
- knowledge and skills to imagine, observe, express, respond to and communicate ideas and perspectives in meaningful ways
- use of available resources and materials including digital tools
- empathy for multiple perspectives and understanding of personal, local, regional, national and global histories and traditions through the arts
- engagement with the diverse and continuing cultures, arts works and practices of First Nations Australians
- understanding of local, regional, national and global cultures, and their arts histories and traditions, through engaging with the worlds of artists, arts works, audiences and arts professions.

Assessment overview

Students will develop a folio of work that includes both making and responding tasks. Their assessment will include experimental and resolved works of art as well as written responding tasks.

'Making' includes learning about and using knowledge, skills, techniques, processes, materials and technologies to explore arts practices and make artworks that communicate ideas and intentions.

'Responding' includes exploring, responding to, analysing, interpreting and evaluating artworks.

Pathways

Students can choose to continue studying in the same Arts discipline (Dance, Drama, Media Arts, Music, Visual Art) in Year 10, or they may choose to try a different strand. It is envisaged that students studying Music Extension in Year 9 will continue onto this subject in Senior. Year 9 Music Extension offers accelerated learning, with students moving through Year 9 – 10 Australian curriculum in one year, offering the opportunity to enrol in the Music Extension course in Year 10 where students commence Units 1 and 2 of the Senior Music syllabus and continue with Units 3 and 4 in Year 11. Students engaged in this pathway will then complete Senior Music Extension in Year 12.

All of The Arts strands are offered from Year 7 to Year 12, and in the Senior phase of learning, all of The Arts courses contribute to an ATAR pathway.

Individual Learning & Development

Aspire Program

Year 7 Aspire English and Humanities

Purpose

Aspire English and Humanities are enrichment courses that enable students to pursue and develop their interests and abilities in the Humanities field (English language, literature and media studies as well as History, Geography, Economics and Philosophy and Reason). The courses explore topics or themes with greater breadth and depth than is normally required and thus enable learners to develop an appreciation of the wider context of a subject area. Teaching and learning in these courses also aims to foster social and emotional growth by challenging students with ethical questions.

Educational enrichment in Aspire English and Humanities include, where possible: greater choice, more opportunity for both independence and collaboration, curriculum materials or resources from later stages or higher levels of study, older students or experts as mentors, excursions, performances and master classes and encouragement and support to enter competitions.

Key Skills

A student studying Aspire English and Humanities at State High is:

- a confident user of written and spoken language;
- a critical thinker who is able to solve problems in a variety of ways;
- curious about how the world works;
- an avid reader; and
- collaborative when working with others.

Unit description (deep understanding)

English and Humanities

Personal Histories

Students listen to, read and view texts that examine learning strategies for success in English and Humanities and reflect on their self-image as a learner.

Semester 1 Big Idea: We Are Our Past

English

'Myths are Public Dreams'

Students question the role of mythology and contemporary literature in shaping and reflecting the values of cultures.

Understanding Life Backwards

Students read life writing to identify and explain diffe ences between points of view in texts from diffe ent historical, social and cultural contexts.

Humanities

Investigating the Ancient Past

Students will investigate how archaeologists and historians investigate the past, the nature of sources and how they are used to solve historical mysteries, using Ancient Egypt as a case study.

The Mediterranean World

Students will investigate the physical features of Ancient Greece, key groups in society, significant individuals and beliefs, values and practices of Athens and Spartan society. Students will then evaluate the significance of these societies in terms of the modern day to determine how we are, or are not our past.

The Asian World

Students will conduct research based learning on Ancient China, analysing a diversity of sources and evaluating the legacies and significance of these societies in the 21st Century.

Semester 2 Big Idea: Perspectives

English

Introduction to Shakespeare
Students view, listen to, and read a collection of excerpts from Shakespeare's body of work, with a focus on poetry and debate its aesthetic and social value.

Perspectives of Place
Students question the impact of advertising texts on people's perspectives of localities and environments close to home and those further afield

Humanities

The Value of Water Is...
Students assess the uses of water, perceptions and values, its diffe ent forms as a resource, the ways it connects places, its varying availability in time and across space and its scarcity. They will develop sustainability awareness, problem-solving skills and make geographical decisions.

Perspectives of Place
Students will focus on the concept of place through an investigation of liveability. This unit examines factors that influence liveability and how it is perceived. Students will look at other cities and compare. This unit develops students' ability to evaluate the liveability of their own place and to investigate whether it can be improved through planning.

Assessment overview

Students will create and respond to a range of written, spoken and multimodal text types in exam and assignment conditions. When possible, assessment tasks will be situated in real-life contexts, for example, if students write a narrative, they may compile their collective efforts into an anthology and peer nominate a selection for entry into writing competitions based on the criteria established for the task. In Humanities, students will work through an independent, historical inquiry using a variety of primary and secondary sources. They will also undertake fieldwork to collect data and present geographically. Most assessment will be conducted separately within the English and Humanities units, however, some may be integrated.

Pathways

Students will progress from Year 7 Aspire English and Humanities to Year 8 Aspire English and Humanities. Students who meet the prerequisites may apply to study English Extension in Year 9. The readiness criteria for English Extension is a minimum B in all criteria in Year 8 English or Year 8 Aspire English. The usual progression would be the study of English Literature in Year 10, 11 and 12. Further enrichment opportunities exist for students in the English Literature and English Extension course (Year 12 only).

Year 7 Aspire Mathematics

Purpose

Aspire Mathematics is an enrichment course that provides students with an opportunity to pursue and develop their interests and skills in the mathematical strands of: Number and Algebra, Measurement and Geometry, and Statistics and Probability. The course explores topics with greater breadth and depth than is normally required and thus enables learners to develop an appreciation of the wider context area of Mathematics.

The learning opportunities in the Aspire Mathematics course includes, where possible: greater choice, more opportunity for both independence and collaboration, excursions and encouragement and support to engage in extension and enrichment opportunities.

Through the study of Mathematics at State High, students will be provided with opportunities to:

- become confident, creative users and communicators of Mathematics.
- be able to investigate, represent and interpret situations in their personal and work lives and as active citizens.
- develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and be able to pose and solve problems and reason in Number and Algebra, Measurement and Geometry, and Statistics and Probability.
- recognise connections between the areas of Mathematics and other disciplines.
- appreciate Mathematics as an accessible and enjoyable discipline to study.

Course outline

The Year 7 Aspire Mathematics course seeks to support students to develop a solid foundation and knowledge of numeracy. The construction of curriculum and units within Mathematics is spiralling in nature and as such, students will engage with strands on a number of occasions throughout the year at increasing levels of complexity. Below is a brief outline of each strand/unit and the associated key skills.

Unit description (deep understanding)

Number

The Number strand develops ways of working with mental constructs that deal with correspondence, magnitude and order, for which operations and their properties can be defined.

Numbers have wide ranging application and specific uses in counting, measuring and other means of quantifying situations and objects.

Algebra

The Algebra strand develops ways of using symbols and symbolic representations to think and reason about relationships in both mathematical and real-world contexts. It provides a means for manipulating mathematical objects, recognising patterns and structures, making connections, understanding properties of operations and the concept of equivalence, abstracting information, working with variables, solving equations and generalising number and operation facts and relationships.

Measurement

The Measurement strand develops ways of quantifying aspects of the human and physical world. Measures and units are defined and selected to be relevant and appropriate to the context. Measurement is used to answer questions, show results, demonstrate value, justify allocation of resources, evaluate performance, identify opportunities for improvement and manage results.

Space

The Space strand develops ways of visualising, representing and working with the location, direction, shape, placement, proximity and transformation of objects at macro, local and micro scales in natural and constructed worlds. This includes notions such as surface, region, boundary, curve, object, dimension, connectedness, symmetry, direction, congruence and similarity.

Statistics

The Statistics strand develops ways of collecting understanding and describing data and its distribution. Statistics provide a story, or means to support or question an argument, and enables exploratory data analysis that underpins decision-making and informed judgement.

Probability

The Probability strand develops ways of dealing with uncertainty and expectation, making predictions, and characterising the chance of events, or how likely events are to occur from both empirical and theoretical bases. It provides a means of considering, analysing and utilising the chance of events, and recognising random phenomena for which it is impossible to exactly determine the next observed outcome before it occurs.

Key skills

Students will be engaged in the following Numeracy Skills throughout the Year 7 Aspire Mathematics course.

- extend their understanding of the integer and rational number systems, strengthen their fluency with mental calculation, written algorithms and digital tools; and routinely consider the reasonableness of results in context
- use exponents and exponent notation to consolidate and formalise their understanding of representations of natural numbers, and use these to make conjectures involving natural numbers by experiment with the assistance of digital tools
- recognise the use of algebraic expressions and formulas using conventions, notations, symbols and pronumerals. They interpret algebraic expressions and formulas, use substitution to evaluate and determine unknown terms where other values are given, and solve simple equations using a variety of methods
- use mathematical modelling to solve practical problems involving rational numbers, ratios and percentages, formulating and making choices about representations, calculation strategies and communicating solutions within the context
- use variables, constants, relations and functions to express relationships in real life data and interpret key features of their representation in rules, tables and graphs
- extend their knowledge of angles to establish further relationships and apply these when solving measurement and spatial problems
- create and use algorithms to classify shapes in the plane and use tools to construct shapes, including two-dimensional representations of prisms and other objects
- use coordinates in the Cartesian plane to describe transformations
- apply the statistical investigation process to obtain numerical data related to questions of interest, choose displays for the distributions of data and interpret summary statistics for determining the centre and spread of the data in context
- conduct probability simulations and experiments involving chance events, construct corresponding sample spaces and observe related frequencies, comparing expected, simulated and experimental results.

Assessment overview

The Year 7 Aspire Mathematics assessment course includes:

- Supervised written assessment tasks; and
- Problem-Solving and Modelling Tasks.

Pathways

Year 7 Aspire Mathematics is the foundation of the Junior School Mathematics Extension course. Students will continue into Year 8 to enter Aspire Mathematics and can then apply for Year 9 Mathematics Extension if prerequisites are met. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Mathematics subjects which continue through Year 11 and 12.

Year 7 Aspire Science

Purpose

Aspire Science is an enrichment course that provides students with an opportunity to pursue and develop their interests and skills in the scientific fields of: Biological Science, Chemical Science, Physical Science and Earth and Space Science. The course explores topics with greater breadth and depth than is normally required and thus enables learners to develop an appreciation of the wider context area of Science.

The learning opportunities in the Aspire Science course includes, where possible: greater choice, more opportunity for both independence and collaboration, excursions and encouragement and support to engage in enrichment and extension opportunities.

Through the study of Science at State High, students will be provided with opportunities to develop:

- an interest in Science as a means of expanding their curiosity and willingness to explore, ask questions about and speculate on the changing world in which they live.
- an understanding of the nature of scientific inquiry and the ability to use a range of scientific inquiry methods, including questioning, planning and conducting experiments and investigations based on ethical principles, collecting and analysing data, evaluating results and drawing critical, evidence-based conclusions.
- an ability to communicate scientific understanding and findings to a range of audiences, to justify ideas on the basis of evidence, and to evaluate and debate scientific arguments and claims
- an ability to solve problems and make informed, evidence-based decisions about current and future applications of Science while taking into account ethical and social implications of decisions.

Course outline

The Year 7 Aspire Science course seeks to support students to develop a solid foundation of knowledge of the Biological, Chemical, Physical, Earth and Space Sciences, including being able to select and integrate the scientific knowledge and methods needed to explain and predict phenomena, to apply that understanding to new situations and events and to appreciate the dynamic nature of science knowledge.

Unit description (deep understanding)

Biological Sciences

Students develop an understanding of living things, including animals, plants and microorganisms, and their interdependence and interactions within ecosystems.

Chemical Sciences

Students develop an understanding of the composition and behaviour of substances. They classify substances based on their properties, such as solids, liquids and gases; or their composition, such as elements, compounds and mixtures. They explore physical changes, such as changes of state.

Physical Sciences

Students develop an understanding of forces and motion. They investigate how an object's motion is influenced by a range of forces, such as frictional and, magnetic, and learn how to represent and predict these interactions.

Earth and Space Sciences

Students explore how changes on Earth and the seasons relate to Earth's rotation and its revolution around the sun.

Key skills

Students will be engaged in the following Science Inquiry Skills throughout the Year 7 Science course.

- Explain how biological diversity is ordered and organised.
- Represent flows of matter and energy in ecosystems and predict the effects of environmental changes.
- Model cycles in the Earth-sun-moon system and explain the effects of these cycles on Earth phenomena.
- Represent and explain the effects of forces acting on objects.
- Use particle theory to explain the physical properties of substances and develop processes that separate mixtures.
- Identify the factors that can influence development of and lead to changes in scientific knowledge.
- Explain how scientific responses are developed
- and can impact society.
- Explain the role of science communication in shaping viewpoints, policies and regulations.
- Plan and conduct safe, reproducible investigations to test relationships and aspects of scientific models.
- Identify potential ethical issues and intercultural considerations required for field locations or use of secondary data.
- Use equipment to generate and record data

Assessment overview

The Year 7 Aspire Science assessment course includes:

- Supervised written assessment tasks;
- Practical experimental reports; and
- Multimodal presentations.

Pathways

Year 7 Aspire Science is the foundation of the Junior Science Extension course. Students will continue into Year 8 to enter Aspire Science. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Science subjects which continue through Year 11 and 12.

Year 8 Aspire English and Humanities

Purpose

Aspire English and Humanities are enrichment courses that enable students to pursue and develop their interests and abilities in the Humanities field (English language, literature and media studies as well as History, Geography, Economics and Philosophy and Reason). The courses explore topics or themes with greater breadth and depth than is normally required and thus enable learners to develop an appreciation of the wider context of a subject area. Teaching and learning in these courses also aims to foster social and emotional growth by challenging students with ethical questions.

Educational enrichment in Aspire English and Humanities includes, where possible: greater choice, more opportunity for creativity, independence and collaboration, curriculum materials or resources from later stages or higher levels of study, older students or experts as mentors, excursions, performances and master classes and encouragement and support to enter competitions.

Key skills

A student studying Aspire English and Humanities at Brisbane State High School is:

- a confident user of written and spoken language;
- a critical thinker who is able to solve problems in a variety of ways;
- curious about how the world works and is an avid reader; and
- collaborative when working with others.

Unit description (deep understanding)

Semester 1 Big Idea: Change

English

Owning Adolescence

Students question the impact of media and literary texts that represent young people and position readers in relation to this group. They challenge the use of language to shape the issues and identities of adolescents.

Shakespeare's *Macbeth*

Students listen to, view and read a range of texts that explore the diffe ent historical, social and cultural contexts of Shakespeare's times and discuss the ways these can influence how audiences interpret his stories.

Humanities

Why do Societies Change?

Year 8 History focuses on the deep understanding of Why do Societies Change? Based on the investigation, through historical inquiry, of three depth studies based on the Ancient to Modern World. These include:

- The Western and Islamic World: Medieval Europe (c. 590 – 1500): Students will investigate how continuity and change influenced the way of life, significant developments, society and the church in Medieval Europe.
- The Asia Pacific World: Japan Under the Shoguns (c. 794 – 1867): Students will investigate how the way of life in Shogunate Japan was influenced by changes in politics and the influence of western societies.
- Expanding Contacts: Students will research the short and long term impacts of a chosen society which has experienced a conquest.

Semester 2 Big Idea: Representing Australia

English

Poetry of Belonging

Students listen to, read and interpret poetry, including Aboriginal and Torres Strait Islander poetry, to explore the relationship between landscape, identity and belonging.

Growing Up Australian

Students listen to, read and view a variety of life writing featuring representations of Australia's peoples, histories and cultures to explore the way we see people and issues.

Humanities

Changing Nations

Students investigate the changing human geography of countries, as revealed by shifts in population distribution. The unit explores the process of urbanisation and draws on a study of a country of the Asia region to show how urbanisation changes the economies and societies of low- and middle-income countries. Students will also examine reasons for internal and external migration, including causes of forced migration, refugees and asylum seekers.

Landforms and Landscapes

Geomorphology through studies of landscapes and landforms. This unit examines the processes that shape individual landforms, the values and meanings placed on landforms and landscapes by diverse

cultures, hazards associated with landscapes, and management of landscapes. The Landforms and Landscapes unit develops students' understanding of the concept of environment and enables them to explore the significance of landscapes to people.

Assessment overview

Students will create and respond to a range of written, spoken and multimodal text types in exam and assignment conditions. When possible, assessment tasks will be situated in real-life contexts, for example, if students write a narrative, they may compile their collective efforts into an anthology and peer nominate a selection for entry into writing competitions based on the criteria established for the task. Most assessment will be conducted separately within the English and Humanities units, however, some may be integrated.

Pathways

Students will progress from Year 8 Aspire English and Humanities to either Year 9 English or Year 9 English Extension if prerequisites are met. All students study Year 9 Humanities which is described above. Senior pathways for students of Aspire English include Prep English and Literature in Year 10, Senior English or Literature in Year 11 and 12, and the one-year course, English Extension, in Year 12. Students can then elect to study Modern History, Ancient History, Economics, Philosophy and Reason or Geography in Year 10, 11 and 12.

Year 8 Aspire Mathematics

Purpose

Aspire Mathematics is an enrichment course that provides students with an opportunity to pursue and develop their interests and skills in the mathematical strands of: Number and Algebra, Measurement and Geometry, and Statistics and Probability. The course explores topics with greater breadth and depth than is normally required and thus enables learners to develop an appreciation of the wider context area of Mathematics.

The learning opportunities in the Aspire Mathematics course includes, where possible: greater choice, more opportunity for both independence and collaboration, student-driven learning, excursions and encouragement and support to engage enrichment and extension opportunities.

Through the study of Mathematics at State High, students will be provided with opportunities to:

- become confident, creative users and communicators of Mathematics;
- be able to investigate, represent and interpret situations in their personal and work lives and as active citizens;
- develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and be able to pose and solve problems and reason in Number and Algebra, Measurement and Geometry, and Statistics and Probability;
- recognise connections between the areas of Mathematics and other disciplines; and
- appreciate Mathematics as an accessible and enjoyable discipline to study.

Course outline

The Year 8 Aspire Mathematics course seeks to support students to continue to develop a solid foundation and knowledge of numeracy. The construction of curriculum and units within Mathematics is spiralling in nature and as such students will engage with strands on a number of occasions throughout the year at increasing levels of complexity. Below is a brief outline of each strand/unit and the associated key skills.

Unit description (deep understanding)

Numbers have wide ranging application and specific uses in counting, measuring and other means of quantifying situations and objects.

Algebra

The Algebra strand develops ways of using symbols and symbolic representations to think and reason about relationships in both mathematical and real-world contexts. It provides a means for manipulating mathematical objects, recognising patterns and structures, making connections, understanding properties of operations and the concept of equivalence, abstracting information, working with variables, solving equations and generalising number and operation facts and relationships.

Measurement

The Measurement strand develops ways of quantifying aspects of the human and physical world. Measures and units are defined and selected to be relevant and appropriate to the context. Measurement is used to answer questions, show results, demonstrate value, justify allocation of resources, evaluate performance, identify opportunities for improvement and manage results.

Space

The Space strand develops ways of visualising, representing and working with the location, direction, shape, placement, proximity and transformation of objects at macro, local and micro scales in natural and constructed worlds. This includes notions such as surface, region, boundary, curve, object, dimension, connectedness, symmetry, direction, congruence and similarity.

Statistics

The Statistics strand develops ways of collecting understanding and describing data and its distribution. Statistics provide a story, or means to support or question an argument, and enables exploratory data analysis that underpins decision-making and informed judgement.

Probability

The Probability strand develops ways of dealing with uncertainty and expectation, making predictions, and characterising the chance of events, or how likely events are to occur from both empirical and theoretical bases. It provides a means of considering, analysing and utilising the chance of events, and recognising random phenomena for which it is impossible to exactly determine the next observed outcome before it occurs.

Key skills

Students will be engaged in the following Numeracy Skills throughout the Year 8 Aspire Mathematics course:

- Solve extend computation with combinations of the 4 operations with integers and positive rational numbers, recognise the relationship between fractions and their terminating orinfinite recurring decimal exp ansions; they convert between fraction and decimal forms of rational numbers and locate them on the real number line
- extend the exponent laws to numerical calculations involving positive and zero exponents, and solve a broad range of practical problems, using mental methods, written algorithms and digital tools
- use mathematical modelling to solve problems in a broad range of contexts that involve ratios with 2 or more terms, percentage increase and decrease, proportions with decimal values, and rates in measurement contexts, and apply proportional reasoning
- manipulate linear and other algebraic expressions, recognise and model situations using linear relations and solve related equations using tales, graphs and algebra
- interpret and explain demonstrations and proofs of Pythagoras' theorem and investigate irrational numbers, their infinite non-recurring decimal expansion and their approximate location on the real number line
- select metric measurement units fit for purpose, convert between units, recognising the effects of different levels of measurement accuracy on the results of computations, and relate these to interval estimates for measurements in various contexts
- apply knowledge of the relationships between p and the features of circles to solve problems involving circumference and area and establish sets of congruency and similarity conditions for common shapes in the plane and create algorithms to test for these conditions, discuss examples and counter examples
- construct and locate objects with reference to three-dimensional coordinates using digital tools
- consider a variety of situations involving complementary and mutually exclusive events, combinations of 2 events; represent these using tables and diagrams, conducting simulations and calculating corresponding probabilities
- examine experimental and observational data and identify populations and samples with respect to context; investigate variation in summary statistics across samples of varying size and discuss their findings.

Assessment overview

The Year 8 Aspire Mathematics assessment course includes:

- Supervised written assessment tasks; and
- Problem Solving and Modelling Tasks.

Pathways

Students in Year 8 Aspire Mathematics continue to develop a strong foundation in the Junior School Mathematics course. Progression through Year 9 Mathematics will build on and extend the core skills of this subject. Students may apply to study Mathematics Extension in Year 9 if prerequisites are met. The readiness criteria for Mathematics Extension is a minimum B in both criteria in Year 8 Mathematics or Year 8 Aspire Mathematics. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Mathematics subjects which continue through Year 11 and 12.

Year 8 Aspire Science

Purpose

Aspire Science is an enrichment course that provides students with an opportunity to pursue and develop their interests and skills in the scientific fields of: Biological Science, Chemical Science, Physical Science and Earth and Space Science. The course explores topics with greater breadth and in depth than is normally required and thus enables learners to develop an appreciation of the wider context area of Science.

The learning opportunities in the Aspire Science course includes, where possible: greater choice, more opportunity for both independence and collaboration, excursions, and encouragement and support to engage in enrichment and extension opportunities.

Through the study of Science at State High, students will be provided with opportunities to develop:

- an interest in Science as a means of expanding their curiosity and willingness to explore, ask questions about and speculate on the changing world in which they live;
- an understanding of the nature of scientific inquiry and the ability to use a range of scientific inquiry methods, including questioning, planning and conducting experiments and investigations based on ethical principles, collecting and analysing data, evaluating results, and drawing critical, evidence-based conclusions;
- an ability to communicate scientific understanding and findings to a range of audiences, to justify ideas on the basis of evidence, and to evaluate and debate scientific arguments and claims; and
- an ability to solve problems and make informed, evidence-based decisions about current and future applications of Science while taking into account ethical and social implications of decisions.

Course outline

The Year 8 Aspire Science course seeks to support students to develop a solid foundation of knowledge of the Biological, Chemical, Physical, Earth and Space Sciences, including being able to select and integrate the scientific knowledge and methods needed to explain and predict phenomena, to apply that understanding to new situations and events, and to appreciate the dynamic nature of science knowledge.

Unit description (deep understanding)

Chemical Sciences

Students develop an understanding of the composition and behaviour of substances. They classify substances based on their composition, such as elements, compounds and mixtures. They explore physical changes, such as changes of state and dissolving, and investigate how chemical reactions result in the production of new substances. Students recognise that all substances consist of atoms, and that chemical reactions involve atoms in substances being rearranged and recombined to form new substances.

Physical Sciences

Students develop an understanding matter and energy. They develop an increasingly rich concept of energy and how energy transfer is associated with phenomena involving motion, heat, sound, light and electricity.

Earth and Space Sciences

Students develop an understanding of Earth's dynamic structure. Students explore the interactions and interdependencies of the systems that comprise the Earth system: the geosphere. They investigate cycles and relationships.

Biological Sciences

Students explore body systems. They consider the interdependence of biological systems at a range of scales, and identify how these systems respond to change.

Key skills

Students will be engaged in the following Science Understanding and Skills throughout the Year 8 Aspire Science course.

- explain how the properties of rocks relate to their formation and influence their use. compare different forms of energy and represent transfer and transformation of energy in simple systems.
- classify and represent different types of matter and distinguish between physical and chemical change.
- analyse how different factors influence development of and lead to changes in scientific knowledge.
- analyse the key considerations that inform scientific responses and how these responses impact society.
- analyse the importance of science communication in shaping viewpoints, policies and regulations.
- plan and conduct safe, reproducible investigations to test relationships and explore models.
- describe potential ethical issues and intercultural considerations needed for specific field locations or use of secondary data.
- select and use equipment to generate and record data with precision.
- select and construct appropriate representations to organise and process data and information.
- analyse data and information to describe patterns, trends and relationships and identify anomalies.
- identify assumptions and sources of error in methods and analyse conclusions and claims with reference to conflicting evidence and unanswered questions.
- construct evidence-based arguments to support conclusions and evaluate claims.
- select and use language and text features appropriately for their purpose when communicating their ideas, findings and arguments to specific audiences.

Assessment overview

The Year 8 Aspire Science assessment course includes:

- Supervised written assessment tasks;
- Practical experimental reports;
- Multimodal presentations and
- Written research tasks.

Pathways

Students in Year 8 Aspire Science continue to develop a strong foundation in the Junior Science course. Progression through Year 9 Science will build on and extend the core skills of this subject. In Year 10, students may choose, if prerequisites are met, one or more preparatory Senior Science subjects which continue through Year 11 and 12.

Intervention Support Programs

The Learning and Enrichment Team aims to promote inclusive practices within the State High learning community, thus enabling the diverse range of learners to successfully access the curriculum and participate in the life of State High. The Department acts in a consultative and collaborative capacity in addressing the learning needs of all students. Initially, at the enrolment stage, the educational needs of individual students are identified and support processes for accessing learning are implemented, where appropriate. Particularly, we focus on the inclusion of:

- students diagnosed with disabilities;
- students experiencing learning diffe ences;
- students from diverse cultural and linguistic backgrounds for whom English is an additional language or dialect (EAL/D); and
- students from Aboriginal and/or Torres Strait Islander backgrounds.

To support these students in accessing the most relevant and meaningful courses of study, the Learning and Enrichment Team offers the following p ograms which are compulsory for identified students equiring support:

- Literacy Program (LPG);
- Numeracy Program (NMG); and
- Language for Academic Success (ELV).

Literacy Intervention Program (LPG)

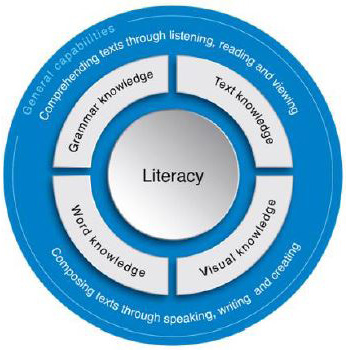
Literacy is an essential skill for students in becoming successful learners at school and in life beyond school. Literacy is the foundation for success in all learning areas; success in any learning area depends on being able to use the significant, identifiable and distinctive literacy that is important for learning and representative of the content of that learning area. Becoming literate is not simply about knowledge and skills. Certain behaviours and dispositions assist students to become effective learners who are confident and motivated to use their literacy skills broadly. They include students managing their own learning to be self-sufficient working harmoniously with others, being open to ideas, opinions and texts from and about diverse cultures, returning to tasks to improve and enhance their work and being prepared to question the meanings and assumptions in texts.

Eligibility for LPG is based on the following criteria:

- students with an identified lea ning difficulty; o
- disability which impacts their cognitive ability;
- academic results or performance:

1. results from recent NAPLAN Test;
2. low academic results (despite in class interventions);
3. information gathered from mainstream teacher (work samples, formative assessment results); and
4. data gathered from previous school(s).

Overview



Organising elements for Literacy

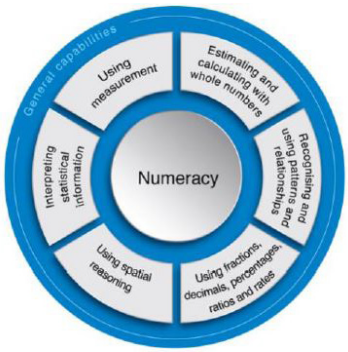
Assessment

Ongoing and daily formative assessment across each strand on the Australian Curriculum Literacy continuum, annually Progressive Achievement Testing (PAT) in comprehension and vocabulary. Students can exit the program at the end of each semester if evidential progress has been made and also in consultation with parents and teachers.

Numeracy Intervention Program (NMG)

Overview

Numeracy skills are important for students to develop logical thinking and reasoning strategies in their everyday activities. Numeracy is a knowledge that students need to use to apply in a wide range of situations. Number, measurement and geometry, statistics and probability are the common area that students need for their personal and study situations. Also algebra functions and relations, logic, and mathematical structure allows students to have an understanding of the natural and human world and how they interact between them. This intervention class allows students to take part in activities that connect them to their own learning with Mathematics and support them to improve in their numeracy skills.



Organising elements for Numeracy

Eligibility for NMG is based on the following criteria:

- students with an identified lea ning difficulty;
- disability which impacts their cognitive ability;
- academic results or performance:

1. results from recent NAPLAN Test;
2. low academic results (despite in class interventions);
3. information gathered from mainstream teacher (work samples, formative assessment results); and
4. data gathered from previous school(s).

Assessment

Ongoing and daily formative assessment across each strand on the Australian Curriculum Numeracy continuum, annually Progressive Achievement Testing (PAT) in Mathematics. Students can exit the program at the end of each semester if evidential progress has been made and also in consultation with parents and teachers.

Language for Academic Success (ELV) Intervention Program

Language for Academic Success (ELV) is a school-based subject, offe ed to targeted and eligible students in Year 7 to Year 10, who use English as an Additional Language or Dialect (EAL/D). Many languages are spoken in homes and communities around Australia. These languages are diffe ent from the Standard Australian English (SAE), recognised as 'the common' language of Australians and used to deliver the curriculum in Australian schools.

LAS is designed to support eligible EAL/D students, who are learning SAE as a new language, while simultaneously learning the curriculum and endeavouring to achieve successful curriculum outcomes. EAL/D students often struggle with the academic language of the classroom as they are still developing the SAE language proficienc . ELV is a subject which provides the opportunity for EAL/D for students to build SAE language skills and develop the academic language required by the diffe ent curriculum areas.

ELV provides support by explicitly teaching language skills in Reading, Listening, Writing and Speaking. Whilst these skills are taught explicitly, they are taught in the context of curriculum areas. ELV is compulsory for targeted eligible students until their language skills have developed sufficientl to allow independent access to mainstream curriculum.

Eligibility for ELV is based on the following criteria:

- English is an alternative language or dialect;
- the student has been in Australia for less than five years
- academic results or performance:

1. on the State High Language Placement Test;
2. results from recent NAPLAN Test;
3. band scales when tested and interviewed by an EAL/D specialist teacher;
4. low academic results;
5. information gathered from mainstream and EAL/D teacher from previous school; and
6. previous data gathered from previous school and/or history of English learning.

Overview

Each semester's work is designed to develop the English language skills needed for success across a range of mainstream subjects. While the demands of the English course are the biggest focus, ELV also helps students develop the language skills needed for other literacy based subjects such as Science and Humanities. Reading skills, continuous writing opportunities, focused grammar episodes, speaking and listening exercises and skill development, individual and group productions in the four strands are all parts of the ELV course.

Assessment

Ongoing and daily formative and summative assessment will be across the four strands which will be gathered to find a final grade. Testing is reflective of the Education Queensland EAL/D Band scales (rating 1-7) which is commonly used across schools in Education Queensland as well as A – E for achievement for behaviour and effort

Digital Pedagogy to Enhance Student Learning — iPads

As part of our curriculum, teachers at State High utilise a number of ICT tools and devices to develop the ICT skills of our Junior students. In 2022, all students in the Junior School at State High will be required to supply their own iPad as standard school equipment through a Bring Your Own Device (BYOD) program. Curriculum and assessment tasks for students in these year levels will involve the use of iPads.

Our goal is for students to use iPads as a tool to support key ICT skills in learning:

- Accessing, organising, processing and publishing information
- Working collaboratively
- Demonstrating creativity
- Communicating with peers, teachers and the wider community.

Teachers will utilise iPads, and other ICT devices, to facilitate deeper engagement in learning and higher-order thinking. These processes, which align with the Australian Curriculum ICT General Capabilities, move students away from seeing ICT devices as a tool for researching, emailing and typing assessment to being catalysts for further knowledge exploration, collaboration and skill development.

The iPad has the varied functionality that will allow students to consume information as well as produce information in a mobile form through:

- The rich combination of resources that are available 24/7. Innovative teaching and learning tools and materials are being developed and will continue to be released as we move forward.
- A wide range of classroom apps and tools as part of the ever-evolving digital platform for learning.
- Textbooks available on the iPad in various formats. This not only alleviates the need to carry heavy textbooks in their school bag, it provides on-demand access to these rich resources.

Preferred device specifications and further information about this program, including Frequently Asked Questions, Cyber-safety resources and iPad help documents, can be found on our website in the Students Resources section of the Support and Resources Tab, or follow this link: https://brisbaneshs.eq.edu.au/support-and-resources/student-resources

All students are to comply with the *Student Learning Expectations for iPads Agreement*, which was signed by students and parents as part of the enrolment process. Specificall , students are reminded that their safety and the safety of their devices remain the responsibility of students and any actions which do not comply with the agreement will be managed according to the school's Responsible Behaviour Plan. Furthermore, students are to ensure that their use of devices does not interfere with their learning or the learning of others and that their iPad is always charged, available and ready for use in the classroom as required, including the ability for the student to access relevant applications.

Senior Course Readiness Criteria and Prerequisites

When making choices for Year 10, we apply readiness criteria. These readiness criteria are aligned to the prerequisites for Year 11 and 12 and should be used to plan senior pathways. The readiness criteria are designed to support students to use evidence of their learning when making decisions about Year 10 courses. Students will have an opportunity in Semester 1 of Year 10 to demonstrate they can achieve the Year 11 and 12 course prerequisites.

When planning your senior pathway, be aware that Brisbane State High School applies prerequisites to Year 11 and 12 subjects. Prerequisites are applied to ensure students select courses in which they have the most capability to be successful. Note that students should demonstrate at least a C standard in English to undertake any General course in Year 11, to ensure success.

Senior course offerings listed by faculty

Senior Course	Subject Category	Prep Readiness Criteria – applied when selecting a subject to study at the commencement of Year 10	Prerequisite – applied when confirming course selection for Year 11
Business, Innovation & Design			
Accounting	General	C in Year 9 English	C in Year 10 Prep Accounting
Business	General	C in Year 9 English	C in Year 10 Prep Business
Design	General	C in Year 9 English	C in Year 10 Prep Design
Digital Solutions	General	C in Year 9 English	C in Year 10 Prep Digital Solutions
Engineering	General	C in Year 9 English C in Year 9 Mathematics	C in Year 10 Prep Engineering C in Year 10 Prep Mathematical Methods
Legal Studies	General	C in Year 9 English	C in Year 10 Prep Legal Studies
Certificate II Furniture Making Pathways	Additional Learning Option	Completion of Year 9 English Completion of Year 9 Mathematics	Completion of Foundation Course: Introduction to Furniture Making Pathways
Diploma of Business	Additional Learning Option	C in Year 9 English	Completion of Foundation Course: Introduction to Business

Senior Course	Subject Category	Prep Readiness Criteria – applied when selecting a subject to study at the commencement of Year 10	Prerequisite – applied when confirming course selection for Year 11
English			
English	General	C in Year 9 English	C in Year 10 Prep English
Literature	General	C in Year 9 English	C in Year 10 Prep Literature
Essential English	Applied	Completion of Year 9 English	Completion of a Year 10 English course
Accelerated Literature Accelerated Pathway	General	A in English or English Extension	Not applicable
English and Literature Extension (Year 12 only)	General	Not applicable	B in Year 11 English or Literature
Health and Physical Education			
Health Education	General	C in Year 9 English	C in Year 10 Prep Health Education
Physical Education	General	C in Year 9 English	C in Year 10 Prep Physical Education
Certificate II Sport and Recreation & Certificate III Fitnes	Additional Learning Option	Completion of Year 9 English	Completion of Foundation Course: Introduction to Sport, Fitness and Recreation
Certificate II and III Sport Recreation	Additional Learning Option	Completion of Year 9 English	Completion of Foundation Course: Introduction to Sport, Fitness and Recreation
Certificate III Health Services Assistance	Additional Learning Option	Completion of Year 9 English	Completion of Introduction to Health Services Assistance
Humanities			
Ancient History	General	C in Year 9 Humanities	C in Year 10 Prep Ancient History
Economics	General	B in Year 9 Humanities B in Year 9 Mathematics	C in Year 10 Prep Economics
Geography	General	C in Year 9 Humanities	C in Year 10 Prep Geography
Modern History	General	C in Year 9 Humanities	C in Year 10 Prep Modern History
Philosophy and Reason	General	C in Year 9 Humanities	C in Year 10 Prep Philosophy and Reason

Senior Course	Subject Category	Prep Readiness Criteria – applied when selecting a subject to study at the commencement of Year 10	Prerequisite – applied when confirming course selection for Year 11
Languages			
Chinese	General	C in Year 9 Chinese across both semesters of study	C in Year 10 Prep Chinese
French	General	C in Year 9 French across both semesters of study	C in Year 10 Prep French
Italian	General	C in Year 9 Italian across both semesters of study	C in Year 10 Prep Italian
Japanese	General	C in Year 9 Japanese across both semesters of study	C in Year 10 Prep Japanese
German	General	C in Year 9 German across both semesters of study	C in Year 10 Prep German
Spanish	General	C in Year 9 Spanish across both semesters of study	C in Year 10 Prep Spanish
Mathematics			
General Mathematics	General	C in Year 9 Mathematics	C in Year 10 Prep General Mathematics
Mathematical Methods	General	B in Year 9 Mathematics or C in Year 9 Mathematics Extension	C in Year 10 Prep Mathematical Methods
Specialist Mathematics	General	A in Year 9 Mathematics or A in Year 9 Mathematics Extension and selection of Mathematical Methods	C in Year 10 Prep Specialist Mathematics
Essential Mathematics	Applied	Completion of Year 9 Mathematics	Completion of a Year 10 Mathematics course
Science			
Biology	General	C in Year 9 Science C in Year 9 English	C in Year 10 Prep Biology C in Year 10 Prep English
Chemistry	General	Selection of Mathematical Methods B In Year 9 Mathematics (core or extension) C in Year 9 English B in Year 9 Science	C in Year 10 Prep Mathematical Methods C in Year 10 Prep English C in Year 10 Prep Chemistry
Physics	General	Selection of Mathematical Methods B In Year 9 Mathematics (core or extension) C in Year 9 English B in Year 9 Science	C in Year 10 Prep Mathematical Methods C in Year 10 Prep English C in Year 10 Prep Physics
Psychology	General	B in Year 9 Science C in Year 9 English	C in Year 10 Prep Psychology C in Year 10 Prep English

Senior Course	Subject Category	Prep Readiness Criteria – applied when selecting a subject to study at the commencement of Year 10	Prerequisite – applied when confirming course selection for Year 11
The Arts			
Dance	General	C in Year 9 English	C in Year 10 Prep Dance
Drama	General	C in Year 9 English	C in Year 10 Prep Drama
Music	General	C in Year 9 English	C in Year 10 Prep Music
Accelerated Music Accelerated Pathway	General	B in Year 9 Accelerated Music A in Year 9 Music	B in Year 11 Music
Film, Television and New Media	General	C in Year 9 English	C in Year 10 Prep Film, Television and New Media
Visual Art	General	C in Year 9 English	C in Year 10 Prep Visual Art

Year 10 – 12 students:

- MUST study either English, Literature OR Essential English; students can do both English and Literature if desired
- MUST study either Essential Mathematics, General Mathematics OR Mathematical Methods
- MUST study six subjects in both Year 11 and Year 12
- CHOOSE any combination of six subjects (including English and Mathematics choices). Four additional electives should also be listed in order of preference
- STUDENTS wanting to study Specialist Mathematics must also study Mathematical Methods
- STUDENTS wanting to study Physics or Chemistry must also study Mathematical Methods

Every effort will be made to ensure that student preferences are accommodated, subject to student numbers and timetable constraints.

BRISBANE STATE HIGH SCHOOL

Junior Course Guide

Brisbane State High School

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