



MAZENOD
COLLEGE



Year 9

Curriculum Handbook

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Introduction

Year 9: The Midpoint of the Mazenod Journey

Year 9 is a pivotal year in the lives of our students. By the end of the year, they reach the half-way mark of their time at Mazenod College. More importantly, however, they reach that key time in their lives when they are well into the transition from being boys to becoming men.

The interaction of these young men with their own learning is critical to how this transition occurs. It is vital that they increasingly take ownership over their learning, and this is reflected in the greater choice they have in their learning pathways.

In Year 9, the students have greater freedom in the choosing of their electives, reflecting the fact that they are beginning to develop a clearer sense of who they are and where their passions lie.

This is the year that the group encounter the Rite Journey Program, which is a powerful experience of transition that challenges the boys to carefully consider their values and their attitudes towards themselves and the world around them.

This Curriculum Handbook articulates the breadth and scope of learning that happens in Year 9. It is a key belief of ours that there is a place for everyone at Mazenod, and our curriculum reflects this with a learning path for every student in the College.




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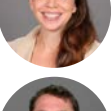
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The Lower School Curriculum

Mazenod College delivers the Western Australian Curriculum in all learning areas. Learning from Years 7 to 9 is characterised by increasing choice and autonomy for students as they begin to explore their own interests and take greater control over their learning.



The five core learning areas are Religious Education, English, Humanities & Social Sciences, Mathematics, and Science. In addition to these, students study Health & Physical Education, the Arts, Italian, Design & Technology, and Digital Technologies.

There are no electives in Year 7, but students get an experience of some of the elective offerings that will be available to them in Year 8. These are:

- | | | |
|------------|---------------------|----------------------|
| Italian | Drama | Music |
| Visual Art | Design & Technology | Digital Technologies |



In Year 8, streaming is introduced in Mathematics, with the grouping of students into Standard and Extended classes. Additionally, Modified Maths and English classes are introduced for students who cannot access the standard content of those courses. Literacy support also takes place during English and Maths.

In Year 8, students select 8 elective courses, each for a semester. From these, students must select one each from Digital Technologies, Design & Technology, Visual Arts and Performing Arts subject areas. There is a wide selection of courses and these can be found in this handbook.



In Year 9, streaming is introduced in English, with the grouping of students into Standard and Extended classes. Additionally, Modified Science is introduced alongside the equivalent Maths and English classes for students who cannot access the standard content of those courses.

In Year 9, students select 6 elective courses, each for a semester. Students can select whichever courses they choose. There is a wide selection of courses and these can be found in the Year 9 Curriculum Handbook.

In Term Three, Year 9 students do 90 minute exams in Religious Education, Mathematics, Humanities & Social Sciences, and Science.

Learning Diversity

Isn't it amazing that we are all made in God's image, and yet there is so much diversity among his people?

- Desmond Tutu

Mazenod enrolls 150 new students each year, and among these are a rich tapestry of individual gifts, experiences and needs.

Most of that diversity is catered for in the everyday work of the classroom and in the pastoral leadership of the College staff. Through differentiated Success Criteria and extra help, our aim is for all students to make progress academically, socially and spiritually.

Some students, however, need further support to meet their learning needs. To help meet the needs of all learners, Mazenod dedicates resources to three areas for learning diversity: Learning Support, Gifted & Talented, and Aboriginal Education.

Learning Support

The Learning Support Team consists of teachers, education assistants and school psychologists. These staff members support students with particular educational and social-emotional needs.

Students with particular learning needs will typically be on some kind of documented plan. These plans include:

Curriculum Adjustment Plan (CAP)

Students on CAPs will usually have a diagnosed learning or social-emotional condition. The CAP serves as a guide for teachers to make adjustments to the instruction, the environment or the assessment of learning for these students. A student on a CAP will still be taught and assessed against the year-level curriculum. These students may also receive extra support from the Learning Support Team.

Individual Education Plan (IEP)

Students on IEPs usually need significant learning support and are often supported by an Education Assistant.

In all cases where a documented plan is in place, parents, carers and the students themselves will be part of the process.

Gifted & Talented

Among our students are those with learning needs that demand that they go beyond the curriculum. These students may not necessarily be achieving the highest grades, but other indicators might suggest that they have cognitive needs that are not being met by the curriculum.

Gifted and talented students are identified through classroom achievement, teacher observation and testing.

In Year 8, gifted students will have opportunities to engage in extra-curricular activities to support their curiosity and their competitiveness. These include the Da Vinci Decathlon, the Have Sum Fun competition, the Ethics Olympiad and the Euler Mathematics program.

In Year 8 and 9, the opportunities for these students expand to include the RiOT Gifted and Talented elective and the Explore Science elective as well as the Specialist Band Program.

Aboriginal Education

While Mazenod is located in Whadjuk Noongar country, it draws Aboriginal students from across the state in addition to the metropolitan area.

Mazenod is committed to supporting the learning ambitions of its Indigenous students while acknowledging and celebrating Aboriginal culture and history.

Aboriginal students are supported by our Aboriginal Education Coordinator. All Aboriginal students in the College will be on **Personalised Learning Plans (PLP)**. These documented plans will focus on the following four key questions for the student:

1. Where is the student now?
2. Where should the student be?
3. How will they get to where they should be?
4. How will we know when they get there?

Learning, Homework & Assessment

All learning activities, whether they be class activities, homework, or assessment aim to give the engaged learner guidance on the following questions:

Homework

Homework is an essential part of the learning for students. Homework tasks allow for students to consolidate their learning, practise a skill, or come to class with prior knowledge for the next lesson.

Year 9 students can expect up to two hours of homework each night.

Homework is monitored by teachers to ensure that students complete it to a standard that reflects a commitment to learning.

School Assessment

Throughout the year, students do assessments that provide feedback to the students and teachers about the learning.

The Mazenod College [Assessment Policy](#) is available on the College website and in the students' diaries.

Assessments can take many forms and may be modified to meet the needs of individual students.

Examination

In Term Three, Year 9 students do their first examinations. The 90-minute exams cover Religious Education, English, Mathematics and Science.

NAPLAN

In Year 9, the students do their final NAPLAN. These tests occur in May and are completed online.

External Testing

Each year, we test our students against national standards to gain a deeper understanding of the skills of our students and to track their progress.

The value of this type of testing is that it can reveal patterns in student learning that are not visible in school assessment alone.

In Year 9, this testing happens in second semester, allowing us to track student progress since the end of Year 8.

The tests we use in Year 9 are below:

eWrite

The eWrite assessment measures functional writing skills in areas such as spelling, syntax, grammar and punctuation.

PAT Reading

The Progressive Achievement Test (Reading) allows us to gain insights into the reading skills of our students.

PAT Maths

The Progressive Achievement Test (Maths) allows us to gain insights into the numeracy skills of our students.

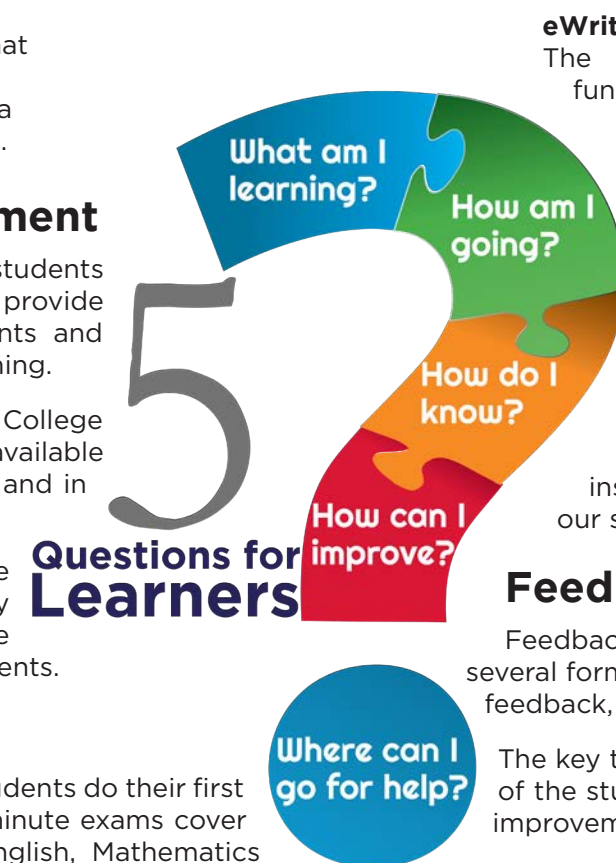
Feedback

Feedback on student learning takes on several forms: written feedback on tasks, peer feedback, verbal feedback during a lesson.

The key to the feedback is the engagement of the student in using the feedback for his improvement.

Parent Engagement

Along with reports and other information, parents are able to access assessment marks through iGloo, which is accessible from the Portal link at the top of the College website. You will need to use your login details provided by the College.



Streaming

At Mazenod, we acknowledge that all students have different learning needs. As the years progress, the content and skills of each course increases in complexity. To support students to continue their own growth, we stream some core subject courses. The streams for their courses are as follows:

Extended

Extended courses are developed for students who need extension to accelerate their learning. These students will work to consolidate “B” grade skills and understanding or to achieve “A” grade levels of achievement against the WA Curriculum.

Standard

The Standard stream is design for students achieve a “C” grade and potentially a “B” grade. This stream aims to help students to consolidate their skills and undersandings of the WA Curriculum for their year-level.

Essentials

This stream is modified to focus on the schools to support students to achieve or consolidate a “C” grade

Modified

Students in Modified classes are delivered a curriculum that is highly modified. Students in this stream experience significant difficulty accessing the WA Curriculum for their year-level.

Year Level Streaming

Streaming is introduced slowly through the years depending on the nature and demand of each course.

Year 7

No courses are streamed in Year 7.

Year 8

Maths is streamed into Modified, Essentials, Standard and Extended.

Year 9

Maths is streamed into Modified, Essentials, Standard and Extended.

English is stream into Modified, Standard and Extended.

Science is streamed into Essentials and Standard.

Reporting

All schools are mandated to grade all students on the same A-E scale against the WA Curriculum. For students in streamed courses, it is also important to report on student achievement in terms of the stream that the student is studying. For this reason, students are reported on in two ways:

WA Curriculum Grade

This is an A-E grade in terms of the year-level standard of the WA Curriculum.

Academic Progress

This is an indicator of achievement relative to the stream that the student is in. This indicator is report on a scale of Excellent, Commendable, Satisfactory, Limited, Unsatisfactory.

Numerical marks are reported relative to the stream that a student is in. For example, a student earning 80% in an Extended course might be considered an “A” while a student with the same mark in a Standard course might be a “B”. This is because the assessments within each stream a designed to cater for different levels of achievement.

The Rite Journey

Your sons will be participating in The Rite Journey as a way to mark the transition from childhood to adulthood.

During The Rite Journey they will have the opportunity to become more aware of the changes they are going through. It is hoped they will have a greater understanding of who they are and how they think about and see their life.

This awareness helps them to make informed choices about who they would like to be, where they are going and what they would like to make of their life. Year 9 is recognised as a time of significant change in the lives of adolescent boys and a time when boys begin to grow from children to young men

Our boys exist in a culture where the period for adolescence can vary considerably, and where young adults can receive very conflicting

messages about good values and expected behaviours.

Traditional rites of passage marked a definite point in ones life when they were an adult and all the expectations and behaviours that go with being an adult. Young men in western societies no longer have a Rite of Passage; a point in which they are expected to behave and act in a certain way.

This can leave young confused and anxious about how to act and behave. Importantly, the need to reinforce and build resilience is important at this key stage of their development.

Through our conversations and ceremonies, we hope to make them aware of what issues young men face and set them on the path to becoming the kind of man they wish to be. A decent member of society.

We hope that they will experience personal growth, increased maturity and resilience and are set on a path towards healthy manhood.



Religious Education

Rationale

Religious Education is the first learning area for all Catholic Schools. It is in this course that our students come to understand the teachings, beliefs and values of the Catholic Church.

The Religious Education course is an academic program that is compulsory for all students through to Year 12. In Senior School, the course can be studied as an ATAR subject towards university entry.

The Religious Education program explores the interplay between religion, society and individuals. It examines the nature of religion and how it offers individuals and their communities an understanding of the world around them. As students develop the knowledge, understanding, values and skills of this course, they understand ways to interact and communicate with people about the diversity of religious beliefs and practices.

The study of Religious Education at Mazenod will help our students to appreciate their role in sustaining a socially just world in which all are created in eyes of God.

Course Outline

TERM ONE: THE HUMAN SEARCH FOR TRUTH

What people have discovered about God and such things as love and the meaning of life can be found in art, books, movies, psychology, religion, and other areas of cultural life.

People like to discover the truth. However, they begin to realise that no one can ever discover the complete truth. In fact, people begin to discover that there are many 'mysteries' in life.

TERM TWO: PEOPLE GROW STRONGER SPIRITUALLY

Every human person has an inner spiritual dynamism that gives them the inner strength which makes it possible to persevere at a difficult task or to cope with pressures from friends or family. This is the spiritual dimension of each person which is called the soul.

Each person has a soul created personally by God. It is the soul which gives a person's character or personality. Even after death, the soul lives on for eternity. It is the spiritual within people that makes it possible for all to reflect God.

TERM THREE: PEOPLE CAN ACHIEVE EMOTIONAL PEACE

All people are affected by emotions. These move people to behave in certain ways. Emotions, like other human gifts, need development. This requires the choice to do what is good for others.

To learn to develop an emotion requires a person to recognise the emotions and acknowledge its effects. The person then needs to try to work out what it is the emotion is urging them to do, and to decide whether or not they are going to behave as it urges.

TERM FOUR: CHRISTIAN LOVE AND SEXUALITY

This unit focuses on how both males and females seek to reflect the goodness of their creator in their own unique and special way. The unit explores what it means to develop our own sexuality. As we grow and develop we become aware of how we can relate more closely with people and what it means to be ourselves. Our sexuality is something that is unique to us and is part of who we are. Human sexuality is about trying to understand the whole person. As we are made in God's image and likeness, we are to reflect God's good nature and express our sexuality in healthy ways.

English

Year 9 Achievement Standard

Reading and Viewing

At Standard, students analyse the ways that text structures can be manipulated for effect. They analyse and explain how images, vocabulary choices and language features work to create meaning. They evaluate and integrate ideas and information from texts to form their own interpretations. They select evidence from texts to analyse and explain how language choices and conventions are used to influence an audience.

Writing and Creating

Students understand how to use a variety of language features to create different levels of meaning. They understand how interpretations can vary by comparing their responses to texts to the responses of others. In creating texts, students demonstrate how manipulating language features and images can create innovative texts. Students create texts that respond to issues, interpreting and integrating ideas from other texts. They edit for effect, selecting vocabulary and grammar that contribute to the precision and persuasiveness of texts and using accurate spelling and punctuation.

Speaking and Listening

Students listen for ways texts position an audience. They understand how to use a variety of language features to create different levels of meaning. Students understand how interpretations can vary by comparing their responses to texts to the responses of others. In creating texts, they demonstrate how manipulating language features and images can create innovative texts. Students create texts that respond to issues, interpreting and integrating ideas from other texts. They make presentations and contribute actively to class and group discussions, comparing and evaluating responses to ideas and issues.

Course Outline

The English course is streamed in Year 9 with Extended, Standard and Modified courses completing similar unit content with modifications in instruction and assessment.

TERM ONE: SPEAKING OF OURSELVES

This term, students will investigate the language of identity and speaking about ourselves and others. They will discover the lives that others' lead and the values and attitudes their backgrounds foster by reading a variety of autobiographical and biographical texts. Students will also create their own autobiographical text. To round off the term, they will be creating a biographical presentation on a class mate.

TERM TWO: VOICES OF OUR PAST & FUTURE

The focus for this term is for students to explore perspectives different from theirs by examining various photographs and oral histories from the past. They will consider our role as Australians in conserving our past voices for the future. Students will study the novel, *The Interrogation of Ashala Wolf* by Ambelin Kwaymullina to consider what our future voices could sound like. They will also have an opportunity to explore issues of importance in our world and share their opinions through various forms of writing.

TERM THREE: THE WORLD OF SHAKESPEARE

This term, students will encounter William Shakespeare, the greatest writer in the English language. They will discover through the drama-filled *Macbeth*, a clear link between the ideas being explored in the 1590s and today. Shakespeare will surprise students, and they will have exciting opportunities to explore his work through reinterpretations and multi-model developments since the days of the Globe Theatre in Elizabethan times.

TERM FOUR: SCIENCE FICTION

This term, students will look at one of the most popular genres of our age - science fiction. Through their study of this genre, they will come to understand how texts can reflect the hopes, fears and anxieties of the worlds in which they were created. This unit will encourage students to unfurl their creativity and produce a short story that will amaze and entertain their readers.

Health & Physical Education

Year 9 Achievement Standard

Health Education

At Standard, students identify and apply relevant criteria to determine reliability of online health information and whether it is suitable for use in a particular context.

Students evaluate a range of characteristics of respectful relationships, such as showing respect for self and others, and personal differences and opinions. They describe and apply appropriate skills and strategies to resolve and manage conflict within different environments.

Physical Education

At Standard, students select and use individual movement skills and sequences that increase in complexity and perform them with increased speed, control and improved accuracy. They implement tactics and adapt them in response to previous performances.

Students describe projectile motion; summation of forces; and ways to measure a number of the body's responses to physical activity. In competitive contexts, students participate ethically and demonstrate ways to build motivation and encourage teamwork.

Course Outline

TERM ONE

Swimming and volleyball are the major practical components in Term One. Pool safety and swimming techniques are covered. In the volleyball unit, whilst developing specific skills, the focus is also on speed, accuracy and the ability to select and adapt responses based on previous performance.

TERM TWO

In the context of AFL, students develop their skills and strategies. The focus is on tactical skills to create and defend space, such as selection of positions. Adapting responses in order to improve performance is also covered in this unit. Skill development in Athletics is covered in the second half of the term, with a focus on timing of sequential body movements to create force.

TERM THREE

In the context of basketball, students continue to develop their skills and strategies. The focus is again on tactical skills to create and defend space, such as selection of positions. Adapting responses in order to improve performance is also covered in this unit.

TERM FOUR

Students take part in the Sports Management Program. The focus is on communication skills that support and enhance team cohesion. They explore the importance of ethical behaviour and fair play in the team based games, whilst managing and running the participation based competition. The development of leadership and collaboration is an important aspect of the program.

Humanities & Social Sciences

Year 9 Achievement Standard

At Standard, students construct a range of questions and hypotheses involving cause and effect, patterns and trends, and different perspectives. They use a range of methods to select, record and organise relevant information and/or data from multiple sources. When interpreting sources, students identify their origin and purpose, and draw conclusions about their usefulness. They examine sources to compare different points of view/perspectives and describe different interpretations. Students analyse information and/or data to identify simple patterns, trends, relationships and/or change over time. They draw evidence-based conclusions, using information and/or data to consider multiple perspectives and/or to propose action in response to contemporary challenges. Students develop a range of texts appropriate to the type of discussion and/or explanation required. They use subject-specific terminology and concepts, and provide evidence from a range of sources to support conclusions, and acknowledge these sources.

Students describe some ways individuals and political parties participate within the electoral system in Australia's democracy. They describe Australia's court system and how the courts resolve disputes. Students identify the principles

of justice and the threats to these principles.

Students explain the interdependence between Australia and other economies by identifying Australia's trading partners, and describe how specialisation results in the exchange of goods and services between countries. They describe the risks and rewards that result from making consumer and financial choices. Students describe innovations and changes in business, and the implications for the current and future work environment.

Students explain the spatial variation and characteristics of natural environments and the interconnections between people, places and environments. They identify the cause and effect of these interconnections, and predict possible implications for people, places and natural environments, now and in the future. Students make inferences about the spatial outcomes of the interconnections between people, places and environments.

Students explain the causes and effects of the Industrial Revolution and World War I over both the short and long term, and the significance of each. Students use evidence to explain patterns of change and continuity over time, and identify the motives and actions of the individuals and groups at that time.

Course Outline

TERM ONE: CIVICS & CITIZENSHIP

Civics and Citizenship in Year 9 aims to provide students with an understanding of the Australian political system. Such an understanding of the political system will empower students and enable them to become active and informed citizens of Australian society. The course will enable students to demonstrate an understanding of Australia's democratic system, including The Constitution, responsible government, the separation of powers, parliament, political parties and law making.

TERM TWO: HISTORY

Year 9 History is a study of the history titled The Making of the Modern World from 1750 to 1918. It was a period of industrialisation and rapid change in the ways people lived, worked and thought. It was an era of nationalism and imperialism, and the colonisation of Australia was part of the expansion of European power. The period culminated in World War I, the 'war to end all wars'.

TERM THREE: GEOGRAPHY

In Year 9 Geography the concepts of place, space, environment, interconnection, sustainability and change continue to be developed as a way of thinking, which provides students with an opportunity to inquire into the production of food and fibre, the role of the biotic environment and to explore how people, through their choices and actions, are connected to places in a variety of ways.

TERM FOUR: ECONOMICS

Economics aims to provide students with an understanding of basic economic structures at a micro level in society. Students will briefly review the role of consumers, producers and the government within the economy. There is an investigation of the role and flow of money in the economy through the 5 sector model. Students will investigate the Australian Economy, the competitive advantage of both a country and a successful business company, savings, investment, and employee and employer rights and obligations.



Mathematics

Year 9 Achievement Standard

Number and Algebra

At Standard, students solve problems involving simple interest. They apply the index laws to numbers and express numbers in scientific notation. Students expand binomial expressions. They find the distance between two points on the Cartesian plane and the gradient and midpoint of a line segment. Students sketch linear and non-linear relations.

Measurement and Geometry

Students interpret ratio and scale factors in similar figures. They explain similarity of triangles. Students recognise the connections between similarity and the trigonometric ratios. They calculate areas of shapes and the volume and surface area of right prisms and cylinders. Students use Pythagoras' Theorem and trigonometry to find unknown sides of right-angled triangles.

Statistics and probability

Students calculate relative frequencies to estimate probabilities, list outcomes for two-step experiments and assign probabilities for those outcomes. They compare techniques for collecting data from primary and secondary sources. Students construct histograms and back-to-back stem-and-leaf plots. They make sense of the position of the mean and median in skewed, symmetric and bi-modal displays to describe and interpret data.

Modified Mathematics

TERM ONE

The focus for Term One will be on decimals and fractions. The course will look at the place value of decimals, adding and subtracting decimals. Towards the end of the term the focus will be on the four operations with Fractions.

TERM TWO

The focus for Term Two will be on measurement. The course will focus on conversion, perimeter and area of shapes.

TERM THREE

The focus for Term Three will be on Pythagoras and Time. The course will focus on learning and using the Pythagoras Theorem. The focus for Time will be converting between the units, reading twenty-four time, reading tables, time difference and applying time.

TERM FOUR

The Term Four focus is on Financial Mathematics. Student will learn about wages and salary, paying tax and best buys.

Essentials Mathematics

TERM ONE

In Term One, students begin by revising numeracy skills from Year 8. They then move into geometry with a focus on: angles and triangles; parallel lines; polygons; congruency; enlargement; and using ratio and scale similar triangles.

TERM TWO

In Term Two, students cover basic Algebra concepts, solving linear equations and consumer mathematics.

TERM THREE

In Term Three, students cover Pythagoras' Theorem and geometry. They also study linear functions as well as the connection between distance, speed and time.

TERM FOUR

In Term Four, students focus on measurement and indices. They consider the areas of composite shapes, and surface area of prisms and cylinders. They learn about index notation, index laws and scientific notation.

Standard Mathematics

TERM ONE

In Term One, students begin by revising numeracy skills from Year 8. They then move into geometry with a focus on: angles and triangles; parallel lines; polygons; congruency; enlargement; and using ratio and scale similar triangles.

TERM TWO

In Term Two, students cover basic Algebra concepts, solving linear equations and consumer mathematics.

TERM THREE

In Term Three, students cover Pythagoras' Theorem and geometry. They also study linear functions as well as the connection between distance, speed and time.

TERM FOUR

In Term Four, students focus on measurement and indices. They consider the areas of composite shapes, and surface area of prisms and cylinders. They learn about index notation, index laws and scientific notation.

Extended Mathematics

TERM ONE

In Term One, students begin by learning about operations with algebraic equations. This extends to using a variety of strategies for solving worded problems algebraically and solving inequalities.

TERM TWO

In Term Two, students cover geometry, Pythagoras' Theorem and trigonometry, and consumer mathematics

TERM THREE

In Term Three, students cover measurement, linear relationships and probability.

TERM FOUR

In Term Four, students learn about index notation, index laws and scientific notation. Students then learn about quadratic equations and graphic circles.

In Mathematics, students are streamed according to ability. Whole outlines for courses may indicate similar broad concepts being covered, the depth and complexity of the learning in these will be informed by the ability levels of the students.



Science

Year 9 Achievement Standard

Science Understanding

At Standard, students explain chemical processes and natural radioactivity in terms of atoms and energy transfers and describe examples of important chemical reactions. They describe wave and particle models of energy transfer and apply these to explain phenomena. Students explain global features and events in terms of geological processes and timescales. They analyse how biological systems function and respond to external changes and describe ecosystems with reference to interdependencies, energy transfers and flows of matter.

Science as a Human Endeavour

Students describe social and technological factors that have influenced scientific developments.

Science Inquiry Skills

Students design questions that can be investigated. They design methods that include the control and measurement of variables and systematic collection of data and describe how they considered ethics and safety. Students analyse trends in data, identify relationships between variables and inconsistencies in results. They analyse their methods and the quality of their data, and suggest actions to improve the quality of their evidence. Students evaluate others' methods and explanations from a scientific perspective and use appropriate language and representations when communicating their findings and ideas.



COURSE OUTLINE

The Science course is streamed in Year 9 with Standard and Modified courses completing similar unit content with modifications in instruction and assessment.

TERM ONE: BIOLOGICAL SCIENCES

The focus for this term is on the way that multi-cellular organisms rely on coordinated and interdependent internal systems to respond to changes to their environment. Students also study the way that ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems.

TERM TWO: PHYSICAL SCIENCES

The idea that energy transfer through different mediums can be explained using wave and particle models is fundamental to students' understandings of the physics of the world around them. This unit will consider sound and light waves, and develop into an understanding of electricity and circuits.

TERM THREE: EARTH & SPACE SCIENCES

The theory of plate tectonics explains global patterns of geological activity and continental movement is at the centre of this unit. Students will learn about the geological forces that shape the earth and its landscapes.

TERM FOUR: CHEMICAL SCIENCES

Students learn that all matter is made of atoms that are composed of protons, neutrons and electrons; natural radioactivity arises from the decay of nuclei in atoms. They learn that chemical reactions involve rearranging atoms to form new substances; during a chemical reaction mass is not created or destroyed. Additionally, students learn that chemical reactions, including combustion and the reactions of acids, are important in both non-living and living systems and involve energy transfer.

Electives

In Year 9, students are free to choose any of the electives with placements determined by class size and timetabling. Students choose 6 electives with more time allocated for study than in Year 8. Although Year 9 electives are not prerequisites for Senior School, students with a passion for these

areas are given an excellent grounding for courses in Years 10-12. Details of the elective units can be found on the College website:

<https://www.mazenod.wa.edu.au/our-learning/lower-school-curriculum>

Design & Technology Units			
No. of Units	Name	No. of Units	Name
1	Design (1 unit course)	1	Metalwork (1 unit course)
1	Design (2 unit course)	2	Metalwork (2 unit course)
1	Engineering: Build a Boombox	1	Woodwork (1 unit course)
1	Engineering: Robotic Engineering	2	Woodwork (2 unit course)
Digital Technologies Units			
No. of Units	Name	No. of Units	Name
1	Digital Technologies: Game Development	1	Digital Technologies: Rescue Robots
1	Digital Technologies: Programming for Maths & Science	1	Digital Technologies: Applying Adobe Software Skills
Visual Arts Units			
No. of Units	Name	No. of Units	Name
1	Visual Art: Art of the New	1	Visual Art: Invention & Fantasy
1	Visual Art: Rapture with Sculpture	1	Media: Gogglebox
Performing Arts Units			
No. of Units	Name	No. of Units	Name
1	Drama: Off the Cuff	1	Music: Music, Media & Mixcraft
1	Drama: Showtime!	1	Music: Practically Amped
		2	Music: Specialist Band Program
Gifted & Talented Units			
No. of Units	Name	No. of Units	Name
1	RiOT (Gifted & Talented)	1	Explore (Science)
Languages Units			
No. of Units	Name	No. of Units	Name
1	LOTE: Italian (1 unit course)	2	LOTE: Italian (2 unit course)
Commerce Units			
No. of Units	Name	No. of Units	Name
1	Commerce: Investment Analysis	1	Commerce: Small Business and Entrepreneurship
Health & Physical Education Units			
No. of Units	Name	No. of Units	Name
1	HPE: Outdoor Education	1	HPE: Specialised Physical Education



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