



Year 9 Electives Handbook 2024



**MAZENOD
COLLEGE**

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.

Elective Selection Information

Students need to select 6 elective courses, each for a semester (Please note that the Specialist Band Program counts as 2 courses as it runs for the whole year).

Unlike Year 8, there is no restriction on what students choose.

Units are independent of each other so students can choose Unit 2 of a course without having to choose Unit 1. Students can choose Unit 1 and Unit 2 of a course if they wish.



Western Australian 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.

Specialist Programs



Specialist Band Program

This is the College's most prestigious music scholarship program, offered to 20-25 of our most dedicated and determined music students. All students selected must demonstrate a willingness to learn and have a strong commitment to practice.

This the second part of a two-year program , which is a full scholarship in Year 9. The students selected will continue to be provided with an instrument, be provided with group or individual tuition and a structured music program with at least four group performance opportunities.

Under the tutelage of our expert music staff, the focus for Year 9 will be on Jazz with students developing performance skills in Blues, Swing, Film Music and improvisation.

During the second year students will become increasingly familiar with their instruments, learning advanced performance techniques, composition, keyboard skills and experience working in a recording studio.

Understanding one's place within a larger ensemble and being able to play under a Band Conductor are a key focus for this second year. 'Grade 2 Jazz and Contemporary' is the level of the musical arrangements to be learnt, with dynamics, rhythm, melody, tone and articulation as the key focus elements of performance. Theoretical lessons will develop both musical understanding and knowledge of music notation and an historical analysis of their chosen instrument.

Academic Extension

Our Academic Extension elective enriches student learning and encourages them to think differently. The program supports the development of logical reasoning and problem-solving skills already evident in the core learning areas. Students will develop their skills through engaging topics like rockets and artificial intelligence, as well as topical real world problems which challenge them intellectually.

As part of the program students work towards their academic goals for the year. This may include:

- Preparing for internal and external academic competitions;
- Attending enrichment events like incursions and excursions;
- Setting SMART goals and mapping their academic progress;
- Participating in other academic extension opportunities as they arise.

Students are offered a place in the program based on their on-going academic performance.

Explore Science

This course is designed to cater for those students who have a talent and passion for science. Explore Science will give students the opportunity to enrich and extend their knowledge and inquiry skill in Science.

The course includes real world science topics not covered in the compulsory core Science course such as Forensic Science. It is designed to allow students to apply their knowledge and explore their interests through practical work and investigations. Explore Science is hands-on, fun and rewarding.



Design and Technology

Design: Innovative Design

This is a course for those who want to design big things and small things!

Students will learn to use Computer Aided Design through a number of different software applications such as Autodesk Inventor, ArchiCAD, and 2D Design to do architectural design.

Students will then test their designs through manufacture by making use of 3D printers, 3D Modelling and VR software.

Moving from the large to the small, students will use 3D printers to produce their own imaginative works that they design on their computers, including small toys, keychains and other objects. Students will complete the following projects/tasks:

Spaceship (Inventor Software)
Master Suite (ArchiCAD Software)
Clock (2D Design Software)

Design: Corporate Design

Students will learn to use Computer Aided Design through a number of different software applications such as Autodesk Inventor, ArchiCAD, and 2D Design to do architectural design. Students will then test their designs through manufacture by making use of 3D printers, 3D Modelling and VR software.

Moving from the large to the small, students will use 3D printers to produce their own imaginative works that they design on their computers. Students will complete the following projects/tasks:

Shop Gift (Inventor Software)
Shop Design (ArchiCAD Software)
Shop Logo Design (2D Design Software)

Electronic Engineering

In this unit, students develop and apply their understanding of electronics to build a bluetooth compatible music player. The body of the player will be designed and 3D printed by the students.

The course will provide students with the theory of electronics, such as electrical safety, basic electronic principles, understanding and recognition of components, calculations in resistance, capacitance and simple circuit laws.

This theory will be applied to the construction of integrated circuitry on manufactured printed circuit boards, culminating in a device to power whatever your musical tastes might be.

Robotic Engineering

Rather than wait for robots to take over the world, take over the robots!

This course brings together design and robotics. In this course, you will use Arduino to program robots such as robotic arms, robotic boom gates for model railways, and traffic light junctions. These will all realistically emulate real life situations.

Students will use design software such as AutoCAD and do practical activities that involve the construction of bread board circuitry using Arduino Interfaces.

Design and Technology

Metalwork - Unit 1

While this subject follows on from the skills that were taught in Year 8, it can also be studied by students new to the course. It is designed to encourage and broaden the students' knowledge of metalworking practices and processes. The course also expands their knowledge of various machines and specialised metalworking equipment as well as developing an understanding of plans and working drawings.

Students in this course will become skilled in the safe use of basic tools and a limited range of metalworking machines. Safety will underpin all teaching and learning experiences.

A focus of this subject will be product design. Students will be asked to solve a design problem in which they will need to come up with their own solution. In doing so the students will learn the relevant design processes needed as well as how to communicate their ideas through the use of Free Hand Sketching and Computer Aided Drafting.

Throughout the course the students are introduced to a range of machines and tools and safe working practices are promoted. Students will complete the following projects/tasks:

Aluminium
Flower
Hose Holder Design and Production
Welding Exercises

Metalwork - Unit 2

A focus of this subject will be product design. Students will be asked to solve a design problem in which they will need to come up with their own solution. In doing so the students will learn the relevant design processes needed as well as how to communicate their ideas through the use of Free Hand Sketching and Computer Aided Drafting. Students will complete the following projects/tasks:

Toolbox
Hacksaw
Garden Art Design and Production

Woodwork - Unit 1

While this subject follows on from the skills that were taught in Year 8, it can also be studied by students new to the course. It is designed to develop the skills and working practices learnt in Year 8 and to prepare students for the more individual and independent project organisation expected in Year 10.

The course also expands their knowledge of various machines and specialised woodworking equipment as well as developing an understanding of plans and working drawings.

Students in this course will become skilled in the safe use of basic tools and a limited range of woodworking machines. Safety will underpin all teaching and learning experiences.

A focus of this subject will be product design. Students will be asked to solve a design problem in which they will need to come up with their own solution. In doing so the students will learn the relevant design processes needed as well as how to communicate their ideas through the use of Free Hand Sketching and Computer Aided Drafting.

Throughout the course the students are introduced to a range of hand tools and safe working practices are strongly promoted. Students will complete the following projects/tasks:

Breadboard
Picture Frame Design and Production
Tea Light Holder

Woodwork - Unit 2

A focus of this subject will be product design. Students will be asked to solve a design problem in which they will need to come up with their own solution. In doing so the students will learn the relevant design processes needed as well as how to communicate their ideas through the use of Free Hand Sketching and Computer Aided Drafting. Students will complete the following projects/tasks:

Serving Tray
Mobile Phone Holder Design and Production
Pot Plant Stand

Programming for Maths and Science

Programming an equation in Maths and a molecule in Science helps you understand them better. Learning how to manipulate a line of code to change a shape can help you better understand the properties of that shape.

This subject is for students who would like to improve or extend their learning in Programming, Maths and Science through programming languages.

Applying Adobe Software Skills

If you enjoy learning how to use the Adobe software this course is for you.

You will learn the basic functions of a variety of industry standard Adobe software and how to apply design concepts to enhance your creations. Applications like Adobe XD, Photoshop, Illustrator, InDesign and Animate will be covered during the unit.

If you are interested in Programming or Game Design, this course will teach you how to create an exciting User Interface for the Programs and Games that you code.

Rescue Robots

Learn how to build and program robots for applications like saving stranded earthquake victims. Students will learn how to use Python code to program autonomous robots.

Students will be working toward participating in the RoboCup, competing against other schools to see who can create the best solution.



Game Development

In this course students will deepen their understanding of Programming and Algorithmic thinking in the context of creating computer games.

Rather than just being consumers of video games, students will learn the principles of game theory so they can make a game people want to play, design so they make a game that looks appealing; and programming, so they make a game that is functional.

Investment Analysis

Students will use a variety of share investment decision making tools including Fundamental, Technical and Behavioural analysis techniques.

Students will manage a \$50,000 virtual share portfolio, gain an understanding of accounting terminology, study the principles of valuation and complete a market appraisal of an actual business.

Students will develop skills in data interpretation, business decision making and become proficient users of Excel.

Small Business and Entrepreneurship

Students will experience being an entrepreneur, planning and creating an invention as well as working in a small team to operate a school market stall.

They will record simulated and real business transactions and produce simplified financial statements in Excel, complete an individual Income Tax return with capital gains events and dividends, study current bank lending practices and assess a home loan application.



Italian

This course builds on the skills, ideas and vocabulary structures developed in Year 8 to provide students with the necessary skills to begin moving beyond elementary verbal and written communication and move into more exciting and sophisticated levels of the Italian language.

Year 9 Italian will cover a wide and interesting variety of topics, focussing on practical and fun activities such as cooking, dancing and conversational exchanges. The cultural and historical background content will be further encouraged through multi-media, audio visual aids and a series of internal and external cultural experiences.



Health and Physical Education

Outdoor Education

The initial emphasis in this one semester course is on the principles of leave-no-trace, sustainability and risk management. From that point on there is a mixture of theory and practical lessons in each cycle.

Theory Component

Students relate to aspects of the seven leave-no-trace principles and how they can inform practice in the outdoors. In particular we consider the first principle, Plan Ahead and Prepare.

Students look at simple risk management strategies, learn the common first aid skills and hygiene considerations needed in the outdoors, develop equipment lists and consider how climate and weather can affect their outdoor activities.

Students also prepare a report on a famous walking trail.

Practical Component

The students relate to the Plan Ahead and Prepare principle and train for their hiking expedition. This training generally consists of swimming and walks in the area of the College to develop their core strength.

The students also learn and practice camp cooking, setting up shelters (tents and hootchies), knot tying and packing rucksacks.

The course culminates with a 2-3 day expedition where the skills and knowledge learnt in the course are put into practice.

Please note there is a limited number of places offered in Outdoor Education for logistical and safety reasons.

Selection criteria will be based on suitability to the subject and recommendations from classroom teachers and the Head of the Health & Physical Education Department.



Specialised Physical Education

This course is offered to students who enjoy Physical Education and want to further develop their skills and strategies.

A variety of sports that are not covered in regular Physical Education classes are offered, such as flag gridiron, lacrosse, floorball, softball and badminton.

Students are given the opportunity to improve their skills and understanding of the methods to improve performance.

Their ability to transfer tactical knowledge and strategies from one sport to the next is a major focus of the course. Practical performance in the selected sport forms the basis for student assessment in this course.

This course comprises of practical lessons only and suits students who enjoy being active and participating in sports.

Performing Arts



Drama: Off the Cuff **Improvisation & Theatre Sports**

Thank God You're Here, we need you on our team! Improvisation is not only a foundational skill in performance studies, but also in life, whether it be handling unforeseen circumstances, making it through an interview, meeting new people or navigating difficult experiences.

Students will learn how to think spontaneously and creatively through a series of practical and fun skill-building exercises and games, leading towards a Theatre Sports competition for a live audience.

Students will also explore how to use improvisation in playbuilding with a look into the most famous improvised theatre- Commedia dell'Arte.

Drama: Showtime **Putting On A Production**

One of the best experiences in Drama is being part of a production, so why not do it in class?

This module aims to explore all areas of production by actually putting on a production for a live audience in a short timeframe.

Students will explore the role of the Actor, Director, Designer and Producer as they select a script, cast roles, rehearse, produce, design, create and perform a show for a live audience with the possibility of a short local tour.

This module is perfect for both performers and the quieter achievers who might prefer to work behind the scenes.

Music: Music, Media & Mixcraft

Using Mixcraft, produce voiceovers for ads, get all "Hollywood" with a track and voice creation for a movie preview, and put any of those things together as a soundtrack to an action-packed cartoon!

Students will learn the importance of music in movies, and how to put its power to use.

They will explore programs, software, keyboard and theory to master their projects and develop a more critical ear for what they hear around them.

The course also deals with live performance and recording. Even students with little to no experience will find successful performance opportunities in a contemporary band setting.

Music: Practically Amped

Amp it up! Want to learn how to make your instrument sound awesome?

This module is all about playing and doing. Students will create and work in a band as they explore how to use amplifiers, microphones, synthesisers and guitars for performance and production.

Students can also expect to leave this module with a solid understanding of working a sound desk, using a recording studio, microphone technique, mixing/production, and operating within a musical group.

Music experience is not a requirement and all instruments are welcome.

Visual Arts

Visual Art 2D: Skateboards, Drawing, Digital Art & Painting

Visual Art fuels creativity, self-expression, and critical thinking, shaping personal growth and broadening our understanding of the world.

In Visual Arts 2D students will have the opportunity to paint on a range of supports including skateboards and canvas. Creating artworks through a focus on art making using wet and dry mediums, such as pencil, charcoal, pastels, conte, watercolour, acrylic paint, ink, oil paint, etching and printing.

This subject is very practical, students create artworks every term by exploring mediums and building skills. As students critically analyse artists, art styles and art movements, students build a strong understanding on how to express themselves in aesthetic ways.

Course Content:

During the course students will learn the process of designing to create artworks. Students will use a variety of Visual Art Mediums and investigate contemporary artists.

Pre-requisites:

None

Visual Art 3D: Clay, Mixed Media & Sculpture

Visual Art fuels creativity, self-expression, and critical thinking, shaping personal growth and broadening our understanding of the world.

In Visual Arts 3D students will continue to on their skills in mediums and materials of a physical nature such as clay, textiles, wire, plaster, moulding, and other sculptural materials. This subject is very practical, students produce artworks each term. These artworks vary in size, and I are student directed.

This subject suits those who enjoy working with a variety of materials, for those who are interested in designing structural forms, and for students who like to work actively. Through viewing and analysing artists, structures, art styles and art movements, students build an awareness of how to communicate ideas and messages, form and function through aesthetic means.

Course Content:

During the course students will learn the process of designing to create their chosen artworks. Students will use a variety of Visual Art Mediums and investigate contemporary artists.

Pre-requisites:

None

Media: Gogglebox Television & Pop Culture

In an age where TV series are superseding film, we have to ask ourselves the question, how did this happen?

Taking a step back and observing pop culture, students will examine television trends including the impact of streaming, singles and interactivity.

Students will pull apart soap opera, reality TV and sitcoms before creating, pitching and filming a pilot episode for a contemporary audience.

Please Note:

These units can be taken per Semester on their own, combined or as a unit each Semester to take the subject for a year long course. For example, you could take 2D in Semester 1 or 3D in Semester 2 or take 2D for both Semesters.