



Lower School Curriculum Handbook

2015



Mazenod College

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Introduction

This Curriculum Handbook provides an overview of learning opportunities offered to students in Years 7-10 at Mazenod.

Mazenod aims to provide a broad range of subjects to suit the many and varied interests and talents of our students as well as provide the necessary skills and knowledge to prepare students for their Senior School studies and for life beyond school.

It should be noted that we have and will continue to implement the Australian Curriculum and that our assessment and reporting reflect this.

At Mazenod, we have a focus on Literacy and Numeracy, and these areas are given more emphasis in our resources. We have a learning support structure in place to assist students who are struggling with their literacy and/or numeracy. We also have a structure in place for extending students who demonstrate high achievement in these areas. In Year 10, classes in English, Mathematics and Science are streamed by ability as demonstrated by students Year 9 studies.

Mazenod also offers two (2) specialist programmes: the Specialist Science Programme and the Specialist Band Programme. These programmes begin in Year 8 with selection based on their aptitude and attitude demonstrated in Year 7.

The Laptop Program highlights our emphasis on technology and our belief that we can do more, better with technology.

Overview of Curriculum

Year 7:

In Years 7 all students will study the core subjects Religious Education, English, Mathematics, Science, Society and Environment and Physical and Health Education as well as the option subjects Art, Drama, Music, Information Technology, Italian and Materials Technology. There is no choice for students in Year 7 as we believe every student should take these subjects to ensure a breadth of experience across a range of subjects which is vital for a wholesome curriculum.

Year 8:

In Years 8 students study the core subjects Religious Education, English, Mathematics, Science, Society and Environment and Physical and Health Education. As well, Year 8 students are able to choose Option subjects. There are 3 options lines or time slots. For each line a student can either choose to do an option for the whole year (a major) or change options in the middle of the year (2 minors). Students can have a mix and match of majors and minors (See Appendix 1 for details). A list of Options offered is contained below.

Extension and Support

In English and Mathematics extension and support classes are timetabled on a weekly basis. In Mathematics a Modified Maths class is timetabled for students who are unable to cope with the regular curriculum.

Year 9:

As with Year 8 students study the core subjects Religious Education, English, Mathematics, Science, Society and Environment and Physical and Health Education. As well, Year 9 students are able to choose Option subjects. There are 3 options lines or time slots and for each line a student can either choose to do an option for the whole year (a major) or change options in the middle of the year (2 minors). Students can have a mix and match of majors and minors (See Appendix 1 for details). A list of Options offered is contained below.

Extension and Support

In Mathematics and English Modified classes are timetabled for students who are unable to cope with the regular curriculum.

The Rite Journey

Also in Year 9 students participate in the Rite Journey. This subject forms a part of students' personal and social development and incorporates...

Year 10:

In Year 10 students study the core subjects English, Mathematics, Science, Society and Environment, Religious Education and Health and Physical Education. Students can either choose to do an option for the whole year (a major) or change options in the middle of the year (2 minors). This means a student can take either 2 major options, 1 major and 2 minor options or 4 minor options. The time allocated to each line increases so that students can get a more in-depth understanding of the content as preparation for studies in Year 11.

Streamed Classes

In English, Mathematics and Science classes, students are streamed into ability groups; Extended and Standard in English and Mathematics, Level 1, Level 2 and Level 3 for Science. For example a student may be placed in English (Extended), Science (Level 2), and Mathematics (Standard). Placement in these classes is determined by students' achievement in these subjects in Year 9. Level 1 courses are more academically rigorous than Level 2, and Level 2 courses are more academically rigorous than Level 3.

Industry and Enterprise Program

Mazenod also offers a VET programme in Year 10 called the "Industry and Enterprise Program". This program provides students with a modified program of study for their core subjects as well as their option subjects. Selection to the program is by invitation, and is suitable for students who have been identified as having good hand skills and are most likely to enter a trade or apprenticeship. The program is designed to assist students make the transition through school into further education and training. The program offers a modified English and Maths curriculum as well as weekly blocks of work experience each term. Society and Environment is not studied as part of the program however, in its place students complete the theory component of a Certificate I in Building and Construction, as well as general instruction in life skills, understanding career pathways and different trades. As part of their Science curriculum students complete a Senior First Aid certificate, and complete a Bronze Medallion course. There is a focus on Outdoor Education skills including team building and personal development.

Option Subjects Offered

Year 7	Year 8	Year 9	Year 10
Art	Art	Art	Art
Drama	Business Studies	Business Studies	Business Studies
Information Technology	Drama	Computer Programming	Computer Programming
Italian	Electronics / Plastics	Drama	Drama
Materials Technology	Information Technology	Electronics	Electronics
Music Technology	Italian	Information Technology	Information Technology
	Metalwork	Italian	Italian
	Media Studies	Metalwork	Metalwork
	Music Technology	Media Studies	Music Technology
	Specialist Band	Music Technology	Outdoor Education
	Specialist Science	Outdoor Education	Specialised Phys Ed
	Technical Drawing	Specialist Band	Sports Science
	Woodwork	Specialist Science	Technical Drawing
		Specialised Phys Ed	Woodwork
		Technical Drawing	
		Woodwork	

Possible ways students can choose majors and minors

1. Doing 6 options (6 Minors)

	Semester 1	Semester 2
Option line 1	Art (Minor)	Drama (Minor)
Option line 2	Woodwork (Minor)	IT (Minor)
Option line 3	Electronics (Minor)	Music Technology (Minor)

2. Doing 5 Options (1 Major and 4 Minors)

	Semester 1	Semester 2
Option line 1	Art (Major)	
Option line 2	Metalwork (Minor)	IT (Minor)
Option line 3	Electronics (Minor)	Media (Minor)

3. Doing 4 Options (2 Majors and 2 Minors)

	Semester 1	Semester 2
Option line 1	Italian (Major)	
Option line 2	Specialist Band (Major)	
Option line 3	Business Studies (Minor)	Media (Minor)

4. Doing only 3 Options (3 Majors)

	Semester 1	Semester 2
Option line 1	Drama (Major)	
Option line 2	Woodwork (Major)	
Option line 3	Specialist Science (Major)	

Subject Outlines for Year 7

Year 7 English	
Term One	Reading and Literature Circles
<p>This term students will have the opportunity to learn about how we read and interpret texts. They will participate in Literature Circle discussions with their peers after each text and then complete a variety of activities. They will develop their comprehension and speaking and listening skills as well as their ability to work within a group. This unit will give students a good overview of all the different aspects of English that they will encounter during the year.</p>	
Term Two	Poetry
<p>This term students will enter the wonderful world of poetry! They will learn about different forms of poetry and poetic techniques which they will use to create their own poetry. They will read a range of famous poems and create a visual poetry presentation on their computer as well as their very own poetry anthology. This unit will give students the skills and knowledge not only for poetry, but for any type of writing in English. Most boys think they don't like poetry, but by the end of this unit we think they will have changed their mind!</p>	
Term Three	Narrative & Persuasion
<p>This term is all about imagination. Students will read their set text, <i>The Invention of Hugo Cabret</i> and become immersed in the magical world of 1930s Paris. They will learn all about how narrative conventions work and use them to create their own narrative. The second half of the term is focussed on the art of persuasion and how you can get everything you ever dreamed of! In conjunction with Society and Environment, students will also write and deliver a speech outlining a global issue and their vision for a better world.</p>	
Term Four	News
<p>This term student will be thrown into the exciting and ever changing world of news. They will learn about the history of news and how news has changed over time. They will focus, in particular, on newspapers and newspaper articles. Students will learn to write in the structure and style of a news report as well as developing the ability to slant the news in order to present a particular point of view. They will learn how to be critical thinkers and discuss the importance of questioning the media.</p>	

Year 7 Health & Physical Education

Term One

PRACTICAL: The practical focus areas in Term 1 are swimming and minor games. Swimming technique in freestyle and breaststroke are covered, and pool safety is investigated. Students then focus on movement skills and sequences within different physical activity contexts and settings.

HEALTH: Students explore their own relationship in the Relating Skills unit. There is a focus on the importance of developing strong relationships and its link to mental health and wellbeing.

Term Two

Practical: Whilst continuing to focus on movement skills and sequences within different physical activity contexts and settings in minor games, students are also introduced to the importance of communication skills to support and enhance team cohesion. Key skills and safety are covered in the Athletics unit, where track and field events are introduced and developed.

Health: Students explore their personal development, physical, emotional and social changes. This unit covers the various challenges through the human lifespan in their growth and development as individuals.

Term Three

Practical: In Term 3 students cover strategic and tactical skills used to create, use and defend space. The unit requires students to begin to gain an understanding of the defensive skills used to gain control and retain possession, again in a variety of sporting contexts.

Health: The health unit is Bullying. Students explore the impact of bullying on mental health and relationships, and the importance of interacting in a positive way with their peers.

Term Four

Practical: Students take part in the Sports Management Program. The focus is on communication skills that support and enhance team cohesion, such as body language and listening skills. They explore the importance of ethical behaviour and fair play in the team based games, whilst managing and running the participation based competition.

Health: The focus during health lessons is participating in sport using appropriate rules, strategies, as well as developing leadership and teamwork.

Year 7 Humanities & Social Sciences

Term One Civics and Citizenship

In this topic students will study the concepts of the Westminster system and democracy by examining the key features of Australia's democracy, and how it is shaped by the Australian Constitution. The concepts of justice, rights and responsibilities will be studied with a focus on Australia's legal system.

Term Two Economics

In this term students will learn about the concepts of making choices and resource allocation. This will provide the context to focus on the interdependence of consumers and producers in the market, the characteristics of successful businesses, including how entrepreneurial behaviour contributes to business success. Work and work futures are introduced, as students consider why people work.

Term Three Geography

In this topic the concepts of place, space, environment, interconnection, sustainability and change continue will be studied as they inquire into the nature of water as a natural resource. The concept of place will be expanded through students' investigation of the liveability of their own place. They will apply this understanding to a wide range of places and environments at the full range of scales.

Term Four History

Students will develop their understanding of History through the key concepts, including evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts will be investigated within the historical context of how we know about the ancient past, and why and where the earliest societies developed.

Year 7 Information Technology

Term One

In Term 1 the focus is on familiarising students with their new laptops and using them effectively. We will complete tasks for the Year 7 Laptop License and start learning how to use Microsoft Word and PowerPoint effectively. The assessment will be a portfolio of the students' work.

Term Two

This term, students start learning the elements and principles of design, how to use Microsoft Publisher and will begin using Adobe Photoshop. Assessments will be a poster from Publisher and a digital design from Photoshop and well as a portfolio of the students' work.

Term Three

The focus in this term will be Adobe Fireworks for image manipulation and animation. The assessment will be a portfolio of the students' work.

Term Four

In Term 4 students will complete project based work around the skills we have looked at during the year. We also use some of the term to cover missed content due to lost lessons or modifications made during the year to assist other learning areas.

Year 7 Mathematics

Term One	Whole Numbers, Number Properties and Patterns
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In the Whole Numbers unit students will learn about place value, addition and subtraction of whole numbers, multiplication and division of whole numbers, estimating and rounding numbers and the crucial rule for order of operations. In the Number Patterns unit students will also learn about factors and multiples, divisibility rules for numbers, prime numbers and powers of numbers. They will also examine the relationship between squares and square roots, develop rules for number patterns and learn about coordinates.

Term Two	Measurement, Fractions and Percentages
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In the Measurement unit students will learn about measurement systems and how to convert between different units. They will also learn about area and perimeter, volume and capacity and mass and temperature. In the Fractions and Percentages unit students will learn about equivalent fractions and how to simplify, add, subtract, multiply and divide fractions. They will learn how to determine the percentage of a number and express a quantity as a proportion.

Term Three	Negative Numbers, Statistics and Probability
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In the Negative Numbers unit students will learn how to add, subtract, multiply and divide integers as well as using order of operations to evaluate expression. They will learn how to substitute negative values into expressions and work with integer coordinates. In the Probability and Statistics unit students will summarising data by dot plots and column graphs, line graphs, stem-and-leaf, pie charts and bar graphs. They will also learn about chance and probability.

Term Four	Equations and Decimals
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In the Solving Equations unit students will learn to solve equations with fractions and with brackets and how to use formulae to describe algebraic relationships. In the Decimals and Place Value unit students will learn about rounding and multiplying and dividing by powers of 10. They will multiply and divide decimals and fractions and learn about the relationship between decimals and percentages.

Year 7 Religious Education

Term One	Celebrating Jesus
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The content is built around the following areas: Living in Community, Learning about Jesus, Christians celebrate Lent and Easter, Celebrating the Eucharist, Sacraments lay the foundation of Christian life. Students will study the life of St Eugene de Mazenod, founder of the Oblates of Mary Immaculate, as part of the topic 'Living in Community'. Students also do a Bible study ongoing throughout the term using text 'The Catholic Youth Bible' NRSV Catholic Edition (Second International Edition).

Term Two	Living as Church
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The content is built around the following areas: God created people to be responsible, Jesus modelled human ideals, The Church is the Body of Christ, The Spirit guides the Church, Christians express their faith through the Church

Term Three	Celebrating Life
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The content built around the areas: People grow and develop, Growth and development lead to a deeper expression of love, People are called to reflect God by respecting human life, Through Jesus, God gives people new life, New life through Baptism, Reconciliation strengthens life, Participating in this new life is a call to Social Justice

Term Four	
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Content is still to be confirmed as the Catholic Education Office is currently developing new units in Year 7.

Year 7 Science

Term One	Chemistry
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This term students will develop their understanding of the world through chemistry concepts. They learn that mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques. In their practical work students will learn to develop fair tests and develop skills to measure and control variables, and to select and use scientific equipment with accuracy appropriate to the task. Students will also investigate natural phenomena and the Earth's resources.

Term Two	Water and Earth Sciences
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This term students will learn that water is an important resource that cycles through the environment. Through this topic students will, consider the water cycle in terms of changes of state of water and investigate factors that influence the water cycle in nature. They also also explore how human management of water impacts on the water cycle, explore how gravity affects objects of the surface of the Earth and consider how gravity keeps planets in orbit around the sun.

Term Three	Biological Science and Physics
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In the Biological Science unit students will learn that there are differences within and between groups of organisms and that classification helps organise this diversity. They will study how interactions between organisms can be described in terms of food chains and food webs and how human activity can affect these interactions. In the Physics unit students will learn how change to an object's motion is caused by unbalanced forces acting on the object. They will investigate the effects of applying different forces to familiar objects, investigate common situations where forces are balanced and unbalanced, and finally investigate a simple machine such as lever or pulley system.

Term Four	Physics and Astronomy
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In this topic students will investigate machines and how forces are related. Specifically students will learn to identify and investigate simple machines such as levers, inclined planes, screws, pulleys, wheels and gears. Students will also consider how Indigenous Australians designed and used a range of machines in the form of weapons and tools. In Astronomy, consider how gravity keeps planets in orbit around the sun

Year 7 Arts

Drama

In Year 7 Drama the students will have the wonderful opportunity of experiencing Drama in its various forms over the year. They will make discoveries about themselves, giving them an insight into their ability to perform in front of others and taking on roles that they would not have considered previously. Learning in a safe and respectful environment this unit of work covers themes and topics like relaxation and concentration, miming techniques, character development, verbal and non-verbal forms of communication, elements of performance and theatre etiquette.

Learning to be comfortable in their 'own skin' the students complete tasks in characterisation, Greek theatre and Silent films. As an introductory course all students are encouraged to participate to the best of their ability, acknowledging their strengths and weaknesses as a performer and respecting the contributions made by others. Journal reflections and analysis of their own work is a key written component of the course.

Music

The Year 7 Music course requires no previous experience and covers basic notation and an introduction to the musical elements of 'pitch', 'rhythm' and 'timbre'. Working with music editing software like 'Mix-craft' and 'Crescendo', the students will compose their own tunes demonstrating a basic understanding of song form and structure. Analysing popular contemporary music the students will reflect on a chosen arrangement in terms of rhythm, composition and structure.

Students whom show an aptitude for Music will be encouraged to apply for the "Specialist Band Scholarship Programme" in Year 8.

Visual Art

The Year 7 Visual Art course is an introductory programme designed to foster enjoyment and appreciation of the visual arts. Participation is the main focus with practical projects that include drawing, painting, graphics, sculpture and printmaking. These studio areas promote engagement and involvement, encouraging the boys to be creative whilst developing confidence with some basic skills.

Almost completely practical by nature the emphasis throughout the year is in 'doing' and 'making', with relevant theoretical content being embedded in each of the projects and reinforced both in the classroom and at home with extension drawing projects. Aimed at preliminary levels those students with natural ability will excel in this Art course.

Subject Outlines for Year 8

Year 8 English	
Term One	Language and Identity – How can stories shape who we are?
In this unit, students will work to develop their understanding of the construction of narratives and the ways that they can shape our identity. They will explore the way authors manipulate narrative and language conventions to present themes to the reader. The focus will be on narratives and the ways they shape identity and place. Students will examine a range of narrative excerpts and short stories and build to a novel study.	
Term Two	The Power of Persuasion: TV, Current Affairs and Advertising
In this unit, students will explore the way that the media has the power to manipulate and persuade audiences to respond to particular issues in particular ways. Students will examine a range of visual media including reality, panel and current affairs shows, advertising, as well as print media and explore the ways that the audience is positioned to respond to issues. Students will explore the way that language can be manipulated to create a persuasive effect and create texts which demonstrate an understanding of this.	
Term Three	Shaping the Old into the New
In this unit, students will explore universal ideas in narratives and what makes them long-lasting in our world. Students will compare original stories with remakes and evaluate them for effectiveness. Through the use of 'Case studies' using <i>The Hobbit</i> , <i>TinTin</i> and <i>Snow White and the Huntsman</i> examining the way those adaptations of the original narratives have been shaped to create graphic novels and then feature films. Students will examine the choices that have been made to appeal to different audiences in different contexts and the aspects that have remained the same. Students will examine the genre of historical fiction in linking old narratives to new ones.	
Term Four	Whodunit? Suspense and Intrigue
Students will examine the features of crime fiction and create their own original murder mysteries, manipulating conventions for effect and suspense. They will also examine the conventions of drama through their construction of radio plays and write an essay	

Year 8 Health & Physical Education

Term One

PRACTICAL: With a focus on swimming and then cricket, students work to develop movement skills and sequences with a focus on increased accuracy and efficiency in skill performance and control of balance and stability. Pool safety and swimming technique are also covered.

HEALTH: In the About Alcohol unit, students look closely at the dangers associated with alcohol consumption and the laws associated with alcohol in society. They also investigate the impact on the community and peer pressure surrounding alcohol during the teenage years.

Term Two

PRACTICAL: Whilst participating in and developing skills in hockey and floorball, students analyse and explore strategic skills and tactics used to create, use and defend space, such as altering body positions. 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.

HEALTH: Within the unit of 'Fit and Healthy' students take a close look at food and nutrition, and the benefits of regular physical activity. The focus is on balancing energy intake and expenditure.

Term Three

PRACTICAL: The major sport covered in Term 3 is Gaelic Football. Students are given the opportunity to develop their skills and strategies in this sport, with a focus on defensive tactics and creating space.

HEALTH: The unit in term 3 is 'Drug Education'. This topic explores the dangers associated with legal and illegal drugs, and their impact on society, mental health and wellbeing.

Term Four

Students take part in the Sports Management Program. The focus is on communication skills that support and enhance team cohesion, such as body language and listening skills. 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.

HEALTH: In the 'Harm Minimisation' unit, students focus on the dangers associated with risk taking. Decision making and peer pressure are also covered in this unit.

Year 8 Humanities & Social Sciences

Term One	Civics and Citizenship
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Students will continue to build on their understanding of the concepts of the Westminster system, democracy and participation. They will investigate the types of law in Australia and how they are made. They will consider the responsibilities and freedoms of citizens, and how Australians can actively participate in their democracy. Students will also explore the different perspectives of Australian identity.

Term Two	Economics
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Students will study the concept of markets through their understanding of interdependence, making choices and resource allocation. Students will also investigate how markets work and the rights, responsibilities and opportunities that arise for businesses, consumers and governments. Work and work futures are explored as students consider the influences on the way people work now and consider how people will work in the future.

Term Three	Geography
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The concepts of place, space, environment, interconnection, sustainability and change continue to be studied as a way of thinking and provide students with the opportunity to inquire into the significance of landscapes to people and the spatial change in the distribution of populations. They apply this understanding to a wide range of places and environments at the full range of scales, from local to global, and in a range of locations.

Term Four	History
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Students will continue to develop their understanding of History through the key concepts, including evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts are investigated within the historical context of the end of the ancient period to the beginning of the modern period, c. 650 AD (CE) – 1750. They consider how societies changed, what key beliefs and values emerged, and the causes and effects of contact between societies in this period.

Year 8 Mathematics

Term One

Numeracy - Reviewing 4 operations with positive and negative numbers, Rule of order of operations, Mental computations and estimations, Primes / factors / multiples / HCF / LCM, Squares and square roots.

Fractions and Decimals - Adding, subtracting, multiplying fractions and decimals, Fractions of quantities, Decimal/Fraction equivalents, dividing with fractions, Prime decomposition

Consumer Maths - Linking fractions, decimals and percentages, Using percentages in everyday life, Finding percentages of quantities, Finding quantities as percentages, Discounts and Commission

Term Two

Algebra - Classifying algebra, add, subtract, multiply and divide terms, Expand brackets, Factorise

Solving equations - Making mathematical sentences, using algebraic techniques to solve equations, solving all aspects of equations, Applying algebra to real life problems

Angles and transformations - Angles in Parallel Lines and triangles, Transformations, Lines of symmetry and rotational symmetry

Term Three

Angles and transformations - Angles in Parallel Lines and triangles, Transformations, Lines of symmetry and rotational symmetry

Linear Graphs - Location in two dimensions, The coordinate number plane, Patterns and rules, Linear patterns, Graphing lines, Comparing points, Applications of linear graphs

Measurement - Conversion of measurement units, Perimeter of shapes including circles, Area of shapes including circles and trapezia, Volume and Capacity of prisms and cylinders, Time

Term Four

Statistics - Interpreting data, Frequency tables, Histograms, Measures of central tendency, Measures of spread, Surveys and sampling

Probability - Probability terms, multiple events, Tree diagrams, Theoretical and experimental probability, Games of chance and applications of probability, Two-way tables in probability, Venn diagrams in probability

Year 8 Religious Education

Term One	The Mazenod College Community
1.	God's revelation: Understand that people come to discover God through their human heart experiences which can only be satisfied by God.
2.	Human experiences: Understand that people find meaning in their human heart experiences through study of their questionings and yearnings in the light of the Gospels.
3.	Sinfulness: Understand that as people accept their failure to respond to their human heart experiences they can relate to the Christian message of repentance.
4.	Salvation: Understand that God offers the promise of salvation through Christ who models how to live in a truly human way.
5.	Christian living: Understand that Catholics are empowered to live like Jesus as they draw upon the power of the love and goodness of the Kingdom of God.
6.	Gospel vision of Society: Recognise that every good value, attitude or way of doing things is a sign of God's presence and influence within culture.
7.	Christian mission: Know and appreciate the values of Christ and those of his Gospels as the basis for living out the Christian mission in the world.
8.	Religion Skills: Demonstrate the skills necessary in order to read and apply Scripture and to participate in Catholic ritual and prayer.

Term Two	The Universal Need for God
1.	Searching for meaning leads to religious experiences
2.	The Christian understanding of true happiness
3.	Discovering God
4.	The basic characteristics of religion
5.	God's Chosen People
6.	Moses and the religion of Israel
7.	Jesus and the Christian religion
8.	The nature of Christian prayer

Term Three	God's Original Plan
1.	People have an appreciation for the wonder of creation and its purpose.
2.	Human beings disagree about the basic purpose of creation and how to treat creation.
3.	Creation as a sign of God's love.
4.	God's creation was initially in a 'state of original holiness and justice'.
5.	The original harmony of God's creation of was damaged by the original sin of the first parents.
6.	Jesus came to restore the original harmony God created by redeeming people's sins through his death and resurrection.
7.	Jesus used elements of creation, including human gestures, as signs of his power and God's blessings to restore harmony.
1.	8. Jesus revealed that creation's 'state of journeying' will lead to an ultimate perfection.

Term Four	Growing in the Image of God
1.	The human body reveals who we are.
2.	People need to accept and appreciate their bodies.
3.	Jesus taught people the purpose of their body.
4.	The relationship between the graces of Baptism and daily life.
5.	The graces of Confirmation are needed to live a Christian life.
6.	Through the Eucharist, Jesus hopes to nourish the spiritual gifts of the baptised and confirmed believers.
7.	The Season of Advent is a time of special prayer when Christians prepare to celebrate the Feast of Christmas and remember the promise of Jesus that he will come again at the end of the world.

Year 8 Science

Term One	Chemistry
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Chemical sciences - mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques. Content includes physical properties of solids, liquids and gases, chemical properties, reactions and biodegradability

Scientific Investigation / Practical work

Laboratory practices, rules and safety, introduction to equipment (glassware, balances, Bunsen burners, rules. The Scientific method and laboratory write-ups, hypothesis V aims V inference, identifying variables, creating tables and graphs from data.

Term Two	Water and Space
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Particle theory, atomic structure, solids, liquids and gases, changing states of matter, heat energy, mixtures – solutions, solute and solvent, types of solutions, suspensions, colloids, concentration, effects of temperature on dissolving, saturated solutions, separating insoluble materials, separating soluble materials (chromatography, evaporation, distillation)

Water - Renewable resources (sun, wind, geothermal, biomass), non-renewable resources (fossil fuels, greenhouse effect), Water cycle (desalination, water management and dams)

Space – stars, planets, constellations,

Term Three	Biological Sciences and physical sciences
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Biological science content: Kingdoms, classification of animals, vertebrates and invertebrates, amphibians, Mammalia, Reptiles and birds, arthropods, classification of plants, adaptations of plants, (habitat, food chains, predators and prey, threats to ecosystems.

Physical Sciences content: forces, acceleration/deceleration, inertia, Newtons Laws of motion, friction, gravity, weight and mass.

Term Four	Machines
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Content includes levers, mechanical advantage, ramps, wedges, wheels and axles, pulleys, gears, hydraulic systems, robotics.

Year 8 Specialist Programs

Specialist Programs are offered in Music and in Science. Entry into these programs is selective and is based on achievement in Year 7 and/or by audition.

Specialist Band Program (Major)

This is the College's most prestigious music scholarship programme, offered to 35 to 40 of our most dedicated and determined music students. All students selected will not necessarily have had previous music experience, but must demonstrate a willingness to learn and have a strong commitment to practice. This is a two year scholarship, beginning as a bursary in their first year followed with a full scholarship in Year 9. The students selected will be given an instrument, be provided with individual tuition and a structured music programme with at least 4 group performance opportunities.

Selection into this prestigious programme is determined in Year 7 and students are committed to the two years under the tutelage of our expert music staff. During the first year students will become increasingly familiar with their instruments learning correct posture, embouchure, major/minor scales and instrument care and maintenance. Understanding one's place within a larger ensemble and being able to play under a Band Conductor are a key focus for this first year. 'Stage 1 Preliminary Orchestral' music is the level of the musical arrangements to be learnt, with 'dynamics' and 'timing' 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 will also form part of the students' development.

Specialist Science Program

The Year 8 Science Specialist Course is offered to students that have displayed an above average aptitude for Science and received consistently high results in assessments throughout Year 7. It is designed to allow the students to apply their knowledge and explore their interests through extended Open Investigations and general experimentation. It is basically hands on, fun and rewarding. Students will receive an offer for a position in the Course (included in this letter) and will need to accept the offer in order to guarantee a place.

Year 8 Arts Options	
Art	(Major / Minor)
<p>The Year 8 Visual Art course looks at extending the students practical skills, especially in observational drawing, providing confidence to portray any theme or subject matter they wish. Each practical project is devised to further develop the students understanding of the elements and principles of Art and Design and is reinforced with practical homework activities in their sketch book.</p> <p>Term 1: During the early part of this unit the students will be introduced to the theories and techniques used in developing the more creative 'right-hand' side of the brain, including 'Upside down' drawing, 'vase' drawing and 'grid' drawing techniques, designed to promote more accurate observation and better drawing skills. Combining these skills with knowledge of the primary and secondary colours the students will also complete a chalk pastel painting of a still life and later demonstrate their understanding of shape by producing a design for a t-shirt silk screen print based on an animal form.</p> <p>Term 2: Using a floral still life theme the students will begin the term reviewing accurate observational drawing techniques and then reinterpret a representational image into a stylised design suitable for a 'lino-block' print. Hand colouring these prints will further develop the students understanding of colour theory. Later in the term the students will continue to develop their drawing skills producing a digital drawing and textural 'sgraffito' image of a person.</p> <p>Term 3: Beginning with a caricature drawing, the students in this unit of work will learn creative ways of interpreting form whilst keeping an aspect of realism. Projects include landscape pastel paintings, colligraph printing and acrylic painting during the term with emphasis placed on the understanding of the elements of art, specifically colour, line, shape and texture.</p> <p>Term 4: As a cross-curricular incentive, students from the various subject areas will be looking at Crime and Crime Scene Investigation. The Visual Arts students will begin this unit of work studying human skull anatomy to provide an insight into forensic reconstruction. Producing their own clay head the students will rely on their understanding of bone structure and muscles to reinterpret a human head. Secondary projects include a digital photo manipulated 'Wanted Poster' and a finger print portrait.</p>	

Media	(Major / Minor)
<p>In this introductory course we will be using the medium of film to explore how to create meaning, and engage an audience, through media. This course is only offered as a minor and will run for a semester.</p> <p>Term 1: Through the analysis of professional films the students will be exploring camera angles and framing, editing techniques (including pace and juxtaposition), and the use of music/SFX to enhance dramatic tension and meaning. Whilst developing a common language and using techniques from contemporary film the students will use 'Premier Pro Film Editing' software to produce a short semi self-scripted film.</p> <p>Term 2: Culminating in the creation of a music video, to be uploaded to the College's YouTube channel the students will explore mood and sense of narrative based upon a selected genre of music. Choosing their own popular song and working in small groups the students will apply previous knowledge of camera angles, framing and editing techniques to develop mood and meaning appropriate to the type of music selected. For all projects the students are expected to keep a journal outlining their ideas, processes, analysis and reflections.</p>	

Drama	(Major / Minor)
<p>Year 8 Drama aims at developing dramatic skills and throughout the year introduce the students to a variety of drama styles. Report writing, reflections and guided homework will extend the students ability to use dramatic terms and justify their decision making in relation to performances, characterisation and dramatic processes.</p>	
<p>Term1: The Year 8 students will begin their work in Drama looking at ‘improvisation’, providing skills in spontaneity, creative thinking, and sense of story-telling, characterisation and reactions to unknown scenarios. Later in the term the students will be reviewing and learning aspects of the elements of performance in preparation for a Puppetry project where they will write scripts and develop characters in a group assessment performance task for their peers.</p>	
<p>Term 2: Having developed a story line for their puppet theatre the students will rehearse, refine and develop their performances looking at traditional and contemporary puppet theatre as sources of inspiration. During the rehearsal process the students will become familiarised with aspects of production including sets, costuming, sound, lighting, production and directing.</p>	
<p>Term 3: This unit of work will further develop the idea of team work and the relevance of the individual with in a group. Learning set characters of traditional Basel masks and working in groups the students will devise a performance using mannerisms of the key characters determined by the masks.</p>	
<p>Term 4: The final term will expand on performance skills and consider marketing strategies for their Basel mask production. Later in the term the students will devise a short performance to tour at our feeder primary schools introducing high school Drama to future perspective students. This performance will be the culmination of previous learnt skills and ask that the students consider the audience, their age, level of understanding and gender.</p>	

Music Technology	(Minor)
<p>This option can be viewed as a stand-alone subject for those music students whom are not part of the Specialist Band Programme and have a keen interest in contemporary music with some skills at playing an instrument. As a Specialist Band student choosing this unit of work, will enhance their musical understanding and develop skills and appreciation for the more contemporary and technical music forms. This course is only available as a minor and will run for a semester.</p>	
<p>Term1: Using ‘Mix-Craft’ software the students will create their own virtual instrumental arrangement, demonstrating an understanding of song structure, song form and the musical elements of melody, harmony, rhythm, tone, form, tempo and dynamics. Reviewing basic music theory the students will be tested at stage 1 Aural and Theory.</p>	
<p>Term 2: The students will begin their second term learning about the various instrument categories, band configuration and performance techniques, providing them with the skills and knowledge to participate in a group performance project. The students will further develop their musical understanding by being assessed at Stage 2 Aural and Theory.</p>	

Year 8 Design & Technology Options

Technical Drawing (Major / Minor)

Technical Drawing plays a significant part in many fields, including, engineering, manufacturing, architecture and drafting and computer modelling. In this course students gain a basic background of skills and understandings in the scope of mechanical drawing. Students will be introduced to design and how to meet the needs of the client. They will learn how to use technical drawing equipment, know line terms and usage, learn how to dimension and label a drawing, sketching and how to render using the correct techniques to enhance their work. Students will be introduced to the basics principles involved with CAD. (Computer Aided Design.) Students will learn the basics of 3-D Modelling, CAD applications and Dimensioning systems.

Woodwork (Major / Minor)

The main aim of these subjects is to further develop the skills and working practices learnt in Year 7 and to prepare students for the more individual and independent project organisation expected in Year 9 and 10. Students are encouraged to develop design and problem-solving skills. The course also expands their knowledge of various machines and specialised woodworking equipment as well as developing an understanding of visual and working drawings. It introduces students to a range of hand tools and promotes safe working practices.

Metalwork (Minor)

These subjects follow on from the skills that were taught in Year 7 and are designed to encourage and broaden the students' knowledge of metalworking practices and processes. Students are encouraged to develop design and problem-solving skills. The course also expands their knowledge of machine tools and specialised metalworking equipment as well as developing an understanding of visual and working drawings. It introduces students to a range of hand tools and promotes safe working practices.

Electronics / Plastics (Minor)

The content and assessment of this course is divided between theory and practical work; 25% Theory and 75% Practical circuit kit building. Students need no prerequisites and most should cope with the mathematical theory concepts that are included in the course. Theory in the course includes basic electronic principles, understanding and recognition of components, calculations in resistance and simple Ohms Law. Practical work involves the construction of transistor and integrated circuitry on manufactured printed circuit board.

Humanities & Social Sciences Options

Commerce (Major / Minor)

During this course students will develop financial life-skills, enhance their communication and critical thinking skills, as well as becoming proficient users of Excel, Word, Publisher and PowerPoint. Topics covered include Investments and the Share Market, Innovation and Inventions, Applied Psychology for Marketing and Negotiations, Consumer Protection Laws and scams, Record keeping and Financial Modelling. Competitions the students will be involved in include: The ASX Schools Share-market Game, The West Australian Newspaper's Design an Ad contest and the Bank of Queensland ESSi Money Challenge. During the course activities students will be involved in include: Business case studies, a Market Day, mock trials for consumer disputes and sponsoring Third World micro businesses.

IT Options	
Information Technology	(Major / Minor)
<p>This course is designed to give the students an opportunity to apply and gain skills in software applications. The course allows the students to practice and consolidate skills in the practical aspects of ICT such as, graphic image manipulation, audio/video editing, animation, programming, game development and using Microsoft Office. Students will use a variety of software applications and tools that enables the interactive use of text, audio, still images, video, graphics and music.</p> <p>Term 1 We start the year doing a review of Microsoft Word and PowerPoint before getting into making movies using Microsoft MovieMaker Live and CyberLink PowerDirector. The assessments this term are a Test on Microsoft Word and a movie created by the students.</p> <p>Term 2 We again used Adobe Photoshop and continue to develop our skills using this application while improving our understanding and use of the elements and principles of design. The assessments this term are a portfolio of student work and their entry to the digital design competition.</p> <p>Term 3 Term 3 is most student's favourite term because we start making games. Programming is a very important skill for the 21st century and we begin exploring programming with the Hour of Code before we move into GameMaker. The term is taken up learning GameMaker before the students create their own game to be assessed.</p> <p>Term 4 During Term 4 we give the students an opportunity to use the skills and knowledge they have developed over the year to create a term long project. They will be analysing a target audience and creating products such as posters and video advertisements that suit the target audience. The project is assessing their application skills, understanding and application of the elements and principles of design and introduces them to project management.</p>	

Languages Options	
Italian	(Major / Minor)
<p>This course builds on ideas, vocabulary and basic grammar structures acquired in Year 7 and is designed to provide students with the necessary skills to communicate at an elementary level with native speakers in both written and spoken exchanges. Students who choose to study Italian in Year 8 will deal with various topics and emphasis is placed on a wide range of practical activities including role-plays and games. The cultural and background content is further encouraged through multi-media, audio-visual programmes and excursions and incursions.</p>	

Subject Outlines for Year 9

Year 9 English	
Term One	Voices of our Neighbours
<p>The focus for this term is to explore perspectives different from our own by examining various oral histories. We will use this to look at the struggles students face and harrowing experiences of our neighbours in south-east Asia. The novel we will study this term will be <u>Bamboo People</u> by Mitali Perkins. A story about two boys who find compassion, strength and friendship in the war torn borders of modern Burma.</p>	
Term Two	Heroes and Villains
<p>The focus for this term will be the Hero's Journey. You will look at the quest narrative as a genre that has survived the ages. Students will read an exciting graphic novel based on the oldest known piece of literature in the English language – Beowulf. Not only will they explore the heritage of western culture they will also explore the world of anime and manga, popular in Japan.</p>	
Term Three	The World of Shakespeare
<p>In this term, we will encounter William Shakespeare, the greatest writer in the English language. Students will discover through <u>Romeo and Juliet</u> a clear link between the ideas being explored in the 1590s and today. Shakespeare will surprise, and students will have exciting opportunities to explore his work through reinterpretations and multi-model developments since the days of the Globe Theatre in Elizabethan times.</p>	
Term Four	Looking for new worlds
<p>This term, we will look at one of the most popular genres of our age – science fiction. Through the study of this genre, students will come to understand how texts can reflect the hopes, fears and anxieties of the world in which it was created. This unit will encourage students to unfurl their creativity and produce a short story that will amaze and entertain readers.</p>	

Year 9 Humanities & Social Sciences

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

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

Term Three	Geography
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The concepts of place, space, environment, interconnection, sustainability and change continue to be studied in Geography. Students will 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. Students apply this understanding to a wide range of places and environments at the full range of scales, from local to global, and in a range of locations.

Term Four	History
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History will allow students study the key concepts of evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts are investigated within the historical context of the making of the modern world from 1750 to 1918. They consider how new ideas and technological developments contributed to change in this period, and the significance of World War I.

Year 9 Health & Physical Education

Note: The Year 9 Health component is covered in the Year 9 Rite Journey program.

Term One

PRACTICAL: Swimming and volleyball are the major practical components in Term 1. 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

PRACTICAL: In the context AFL, students develop their skills and strategies. The focus is on tactical skills to create and defend space, such of 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

PRACTICAL: 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 of selection of positions. Adapting responses in order to improve performance is also covered in this unit.

Term Four

PRACTICAL: 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.

Year 9 Mathematics

Term One

Numeracy - Revision of Basic Numeracy concepts, working with calculator, Integer Operations, Rule of Order, Negatives, Powers, LCM/HCF, Primes, decimals, fractions, ratios and rates, percentages
Geometry - Angles and triangles, Parallel Lines, Polygons, Congruency, Enlargement and similar figures
- Using Ratio and Scale, Similar Triangles
Problem solving: Applying the process in a measurement context using technology (Geometry Aplets on ClassPad)
Algebra - Common algebraic notations and conventions, simplifying algebraic expressions, substitution into formulae, expanding single and double brackets, factorise algebraic expressions

Term Two

Solving Linear Equations - Factorise algebraic expressions and trinomials, solving linear equations, solving equations with brackets and variables on both sides, solving word problems, evaluating expressions and formulae
Problem solving: Investigate real world consumer applications
Consumer Mathematics - Percentages, Best Buy, Percentage increase and Decrease, Profits and Discounts, Income and Taxation, Simple Interest
Problem solving: Investigate real world consumer applications
Trigonometry – Pythagoras's theorem, tangent ratio

Term Three

Measurement - Conversion of measurement units, Perimeter of shapes including circles, Area of composite shapes including circles and trapezia, Surface Area and Volume of prisms and cylinders, Capacity
Numeracy- Revising decimal arithmetic, estimation and rounding
Problem solving: Applying the process in a measurement context through building models and using technology
Linear Relations - Linear functions, Rearranging Linear Equations, Gradients and intercepts, The connection between distance, speed and time, Direct Proportion, Gradients and Direct Proportion, Finding the equation of a line, Linear Modelling, Direct Proportion, Graphical solution of simultaneous equations.
Problem Solving: Use technology (ClassPad) to create a picture from linear functions

Term Four

Indices - Index notation, Index Laws, Scientific Notation, Scientific Notation
Problem solving: Investigate real life applications of indices
Quadratics - Factorising and null factor law, Plotting quadratics, Recognising vertical shifts, Features: x and y intercepts, LOS, TP, Graphs in factorised form, Identifying functions from graphs
Problem solving - Exploring other functions: circles

Year 9 Religious Education

Term One	People Grow Stronger Spiritually
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1. Young people discover new spiritual experiences
2. People can develop spiritual relationships
3. People find it hard to develop spiritually
4. God the Father and Jesus sent the Holy Spirit
5. Jesus was filled with the Holy Spirit
6. Jesus revealed how to draw on the strength of the Holy Spirit
7. Mary was filled with the Holy Spirit

Term Two	People Grow Stronger Spiritually
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1. Young people discover new spiritual experiences
2. People can develop spiritual relationships
3. People find it hard to develop spiritually
4. God the Father and Jesus sent the Holy Spirit
5. Jesus was filled with the Holy Spirit
6. Jesus revealed how to draw on the strength of the Holy Spirit
7. Mary was filled with the Holy Spirit

Term Three	Christian Love and Sexuality
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1. Adolescence is a time of change, challenge and growth
2. The Gift of sexuality
3. Developing a healthy sexuality
4. The Challenge of developing a healthy sexuality
5. Jesus promises the power of divine love
6. God empowers people to live chaste lives
7. God calls people to develop a healthy sexuality
8. God's plan for married love

Term Four	People Can Achieve Emotional Peace
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1. Emotions move people
2. The emotions function best when directed by the will
3. Jesus promises salvation
4. Jesus shares his power to love: sacraments and commandments
5. Sin and how God helps people to overcome it
6. Penance – Sacrament of healing
7. Anointing – A Sacrament of healing

Year 9 Science

Term One	Energy and Electricity
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Energy content includes heat (temperature scales, absolute zero, heat transfer, conduction, particle movement model, insulation convection, radiation), light (definition of light and EM spectrum, infrared light) and sound (mechanical energy transfer, sound waves, transverse and longitudinal waves, frequency and pitch, speed of sound in different mediums, hearing range, ultrasonic and infrasonic devices, light as a wave, EMR, translucent, transparent and opaque, simple properties of light, laws of reflection and mirrors, refraction, lenses, converging and diverging lenses, real and virtual points,

Electricity content includes electric charge, static and current electricity, electroscopes, simple electric circuits, (symbols and diagrams), measuring electricity (voltage and current, multimeters, Vernier gear), batteries and photovoltaic cells, resistance and conductors, Ohms Law, basic parallel and series circuits, basic combination circuits, electrical safety, electromagnets, motors and generators, AC and DC current.

Term Two	Ecosystems and body coordination
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Ecosystems – biotic and abiotic factors, adaptations, sustainability, photosynthesis, biodiversity, natural and human impacts on ecosystems

Body Coordination – the nervous system (central – the brain, peripheral – skin, ears, eyes, tongue), sensitivity, the endocrine system, hormones and homeostasis, controlling temperature, kidney function (blood sugar control), adrenal glands and stress

Term Three	Chemistry
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All matter is made of atoms which are composed of protons, neutrons and electrons; natural radioactivity arises from the decay of nuclei in atoms

Chemical reactions involve rearranging atoms to form new substances; during a chemical reaction mass is not created or destroyed,

Chemical reactions, including combustion and the reactions of acids, are important in both non-living and living systems and involve energy transfer

Atomic structure - structure of the atom, elements and isotopes, the Periodic Table, electron configuration, ions, cations and anions, ionic bonding and ionic formulae, forming ions in solutions (electrolysis),

Acids and Bases – pH scale, reaction times, endothermic and exothermic reactions, writing chemical equations, combustion and corrosion reactions, conservation of mass, acid reactions (acids and metals, acids and carbonates), writing chemical equations of acid reactions, neutralisation, making hydrogen.

Term Four	Earth and Beyond
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Astronomy – solar system, planets (Mercury, Saturn and Pluto), asteroids, comets and meteors, black holes, living and working in space.

Year 9 Specialist Programs

Specialist Programs are offered in Music and in Science. Entry into these programs is selective and is based on achievement in Year 8 and/or by audition.

Specialist Band Program (Major)

This is the College's most prestigious music scholarship programme, offered to 35 to 40 of our most dedicated and determined music students. All students selected will not necessarily have had previous music experience, but must demonstrate a willingness to learn and have a strong commitment to practice. This is a two year scholarship, beginning as a bursary in their first year followed with a full scholarship in Year 9. The students selected will be given an instrument, be provided with individual tuition and a structured music programme with at least 4 group performance opportunities.

Selection into this prestigious programme is determined in Year 7 and students are committed to the two years under the tutelage of our expert music staff. During the first year students will become increasingly familiar with their instruments learning correct posture, embouchure, major/minor scales and instrument care and maintenance. Understanding one's place within a larger ensemble and being able to play under a Band Conductor are a key focus for this first year. 'Stage 1 Preliminary Orchestral' music is the level of the musical arrangements to be learnt, with 'dynamics' and 'timing' 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 will also form part of the students' development.

Specialist Science Program

The Year 9 Science Specialist Course is offered to students who have displayed an above average aptitude for Science and received consistently high results in assessments throughout Year 8. It is designed to allow the students to apply their knowledge and explore their interests through extended Open Investigations and general experimentation. It is basically hands on, fun and rewarding. Students will receive an offer for a position in the Course (included in this letter) and will need to accept the offer in order to guarantee a place.

Year 9 Arts Options	
Art	(Major / Minor)
<p>This subject builds on the skills acquired in Year 8 and aims to extend those students who demonstrated a sincere competence in the visual arts. Both the major and minor courses cover a variety of themes and students will be encouraged to make personal responses to their environment, social and physical, using a variety of media. A wide range of activities are covered including ceramics, printmaking, computer aided graphics, painting and sculpture. Reference to various Art History themes are studied to foster an appreciation of the arts and to generate creative thinking. Drawing is an emphasis as a studio project itself or in preparation for other studio areas.</p>	

Drama	(Major)
<p>The Year 9 Drama program is available to all students interested in developing their confidence and skills as a performer. The class work incorporates a variety of practical performances including Variety Nights, Catholic Schools Performing Arts Festival and the creation of student devised work. The students broaden their understanding of acting by studying various dramatic styles such as Melodrama, Elizabethan Theatre and Improvisation. The students will also be a part of the annual Theatresports Competition as they do battle in a <i>Whose Line Is It Anyway</i> style performance! There is also a theory component included in the Year 9 Drama course, including reflection and analysis of their own work, and other viewed works. Students wishing to study Drama in Years 10 – 12 should also choose to study Drama in Year 9.</p>	

Media Studies	(Minor)
<p>In Year 9 Media Studies, students will learn to identify and deconstruct the key features and structures of a range of media texts. Students will explore how audience values and attitudes can shape, and be shaped by, popular media. They will also gain an understanding of how political, economic and ethical constraints influence the choices that producers of media works make, and apply this understanding in their own work.</p> <p>In the first term, there is a focus on representation in print media, including the construction of celebrity and character types in magazines and advertising. Through an exploration of photographic codes and conventions, as well as written codes and image composition, students will understand how our reading of an image can be impacted by elements such as lighting, camera angle, framing, setting, etc. Students will need to use still cameras, and simple image editing software such as Microsoft Paint or Photoshop.</p> <p>In second term, students begin to explore representation in film through viewing, and deconstructing, a range of documentaries, and documentary styles. Students will apply their knowledge to the creation of a documentary about themselves, with focus on a particular aspect of their life.</p>	

Music Technology	(Major / Minor)
<p>The Year 9 Class Music program incorporates the use of music technology, practical performance in ensembles, composition tasks, and some written theory. The students broaden their understanding of music by studying various musical styles throughout the year. Students wishing to study Music in Years 10-12 should also choose to study Music in Year 9. Project assessments include composing music to media, remixing, individual and group performances, and developing music industry vocational skills. Students will utilise software such as Mixcraft, Ableton Live and Logic Pro. This course is designed to give students an insight into vocational elements of the music industry. Due to the performance aspect of this course, it is preferred that students who take this option also learn a musical instrument, either privately or through the College.</p>	

Year 9 Design & Technology Options

Electronics

(Major / Minor)

The content and assessment of this course is equally divided between theory and practical work. Students need no prerequisites and most should cope with the mathematical theory concepts that are included in the course. Theory in the course includes electrical safety, basic electronic principles, understanding and recognition of components, calculations in resistance, capacitance and simple circuit laws. Students investigate needs, opportunities and problems that are defined in a design brief. They devise a solution that considers factors such as function, environment, materials, components and parts. As part of this process students will be introduced to elements of design and the use of CAD programs.

Practical work involves the construction of transistor and integrated circuitry on manufactured printed circuit board.

Woodwork

(Major / Minor)

The main aim of these subjects is to further 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. Students are encouraged to develop design and problem-solving skills. The course also expands their knowledge of various machines and specialised woodworking equipment as well as developing an understanding of visual and working drawings. It introduces students to a range of hand tools and promotes safe working practices.

Students in this course will need to become skilled in the safe use of the basic tools and a limited amount of machines in the Woodwork Room. They will need to develop problem-solving skills to enable them to effectively use the Technology Process to design their some of their “Tasks”. Safety will underpin all teaching and learning experiences.

Key Teaching and Learning objectives

Safety rules associated with workshop.

Literacy in the use of tool, machine and material names

Lateral thinking - skills and methods to enhance lateral thinking. eg mind maps

The Technology Process is – What does it look like? – How do we use it? Who would use it and when would they use it?

Facts associated with materials used in this course.

Respecting the workshop and others in it.

Projects

Due to resource, machine availability restrictions these tasks will vary in order from class to class.

Task 1 – Chopping Board – the chopping board will allow students to learn how to glue pieces of timber to form a flat surface. They will design, shape and finish their chopping board to a high standard

Task 2 –Tool Box – following a set plan the students will cut, shape and construct the tool box. They will further develop their Band Saw skills and shaping skills. They will also learn about different types of screws, their characteristics and how they are used.

Task 3 – Picture Frame – Students will construct a Picture Frame using Mitre Joints to a prescribed size for a particular photograph. The students will have the option of choosing the finish they put on the frame to suit the desired look.

Task 4 - Tea Light Holder (Design) - Students will construct a Tea Light Candle holder to a prescribed size for use with tea light candles. . They will then follow a process of design, looking at concepts, development and sketching skills to come up with a final design for the legs of the holder. Under supervision, students will work individually producing their design and evaluating the finished product.

Task 5 – Serving Tray – The students will construct a Serving Tray following a plan provided. Students will further their shaping and will learn how to construct a Keyed Mitre Joint.

Task 6 - Pen – Students will be introduced to the Wood Lathe. They will use the between centres turning method to make their Pen.

Technical Drawing	(Major / Minor)
<p>This course is designed to further expand the knowledge and skills learnt in the short introductory courses of Year 8. Students are encouraged to link their knowledge of Technical Drawing with their practical skills so as to develop better design folios. Students are also introduced to Computer Aided Design.</p>	

Metalwork	(Major / Minor)
<p>These subjects follow on from the skills that were taught in Year 8 and are designed to encourage and broaden the students' knowledge of metalworking practices and processes. Students are encouraged to develop design and problem-solving skills. The course also expands their knowledge of machine tools and specialised metalworking equipment as well as developing an understanding of visual and working drawings. It introduces students to a range of hand tools and promotes safe working practices.</p>	

Year 9 Health & Physical Education Options	
Specialised Physical Education	(Minor)
<p>This course is offered to students who enjoy HPE and want to further develop their skills and strategies. A variety of sports are covered, with Tennis being the focus in Term One. Students are given the opportunity to improve their skills and understanding of the methods to improve performance. In Term Two a combination of invasion/evasion sports are explored, and the ability to transfer tactics and strategies from one context to the next is a focus.</p>	

Outdoor Education	Minor
<p>The initial emphasis in this one semester course is on the principles of leave-no-trace and on risk management. From that point on there is a mixture of theory and practical lessons in each cycle.</p> <p>Theory component: Students relate to aspects of the seven leave-no-trace principles and how they can inform our practise 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.</p> <p>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.</p>	

Year 9 Information Technology Options	
Information Technology	(Major / Minor)
<p>This course is designed to give the students an opportunity to apply and gain skills in software applications. The course allows the students to practice and consolidate skills in the practical aspects of ICT such as, graphic image manipulation, web site design, programming, audio/video editing, 2D/3D Animation and green screening. Students will use a variety of software applications and tools that enables the interactive use of text, audio, still images, video, graphics and music.</p> <p>Term 1 Term 1 begins with new Microsoft Word skills and students are introduced to Microsoft Excel. After this we continue our progress through Adobe Photoshop and the elements and principles of design. Assessments include a test using the Microsoft products and a task to create product packaging for a breakfast cereal, where students use their Photoshop skills and their understanding of design theory.</p> <p>Term 2 In Term 2 students start creating video with Adobe Premiere and learn skills such as editing and green screening. For the term project students create a video to explain how to do a simple task such as tying a tie or doing a magic trick.</p> <p>Term 3 In Term 3 students learn to use Adobe Illustrator with a focus on Logo design. They will then learn about Adobe Flash and use it to create animation and interactive movies with simple scripting. Students will also be introduced to Dreamweaver. Assessments are a portfolio of animations and a simple website to display their work.</p> <p>Term 4 In Term 4 we focus on a charitable organisation and create a variety of products intended to promote the charity. Products include a video, posters, animations and interactive movies and a website. This project is the assessment for the term and focuses on the use of design theory, application skills and project management.</p>	

Computer Programming	(Major / Minor)
<p>The intention of the Computer Programming course is to teach students fundamental skills in programming so they can compete in a digital world. As we include more technology into our lives it is a valuable skill to be able to interact with and create programs for computers, smart phones and future technologies. See www.code.org for more information about why learning to code is important. The students will get exposure to several programming platforms (Scratch, Python, Game Maker) with the ultimate goal of being able to create apps using the Android Software Development Kit. Students will also be required to use skills in multimedia applications in order to create apps that function well with a pleasing Graphical User Interface.</p> <p>Term 1 Students are introduced to Computer Programming and the basic rules and statements to create functional algorithms. There is a term test and an ongoing assessment each week of the tasks completed.</p> <p>Term 2 During Term 2 students are introduced to the programming language Scratch and learn how to develop programs using Scratch. The students create an interactive story using Scratch and create a game they can play. Both of these programs are assessments.</p> <p>Term 3 In term 3 students learn the programming language, Python, and how to develop programs using this language. Students participate in the National Computer Science School Challenge which teaches them the basics of programming and challenges them to solve weekly problems.</p> <p>Term 4 In Term 4 students are introduced to the MIT development environment, AppInventor 2, where students will start developing apps. The term project is to create an app that works on Android devices.</p>	

Year 9 Humanities & Social Sciences Options

Commerce (Major / Minor)

During this course students should gain an in-depth understanding of business concepts and personal finance. Topics covered include: Investments and the Share Market, Inventions, an Introduction to Law including Consumer Protection and Scams, Marketing, Business Record Keeping, Income Tax and Financial Modelling. During the course students will participate in competitions including: The ASX Schools Share-market Game, The West Australian Newspaper's Design an Ad contest and the Bank of Queensland ESSI Money. Students should develop legal and financial life-skills and become proficient users of Excel, Word, Publisher, PowerPoint and E-Tax.

Year 9 Languages Options

Italian (Major / Minor)

This course builds on ideas, vocabulary and basic grammar structures acquired in Year 8 and is designed to provide students with the necessary skills to communicate at an elementary level with native speakers in both written and spoken exchanges. Students who choose to study Italian in Year 9 will deal with various topics and emphasis is placed on a wide range of practical activities including role-plays and games. The cultural and background content is further encouraged through multi-media, audio-visual programmes and excursions and incursions. Students who intend to continue with their Italian studies in Yr 10 and in upper school must study it in Yr 9 due to the academic nature of the course.

Subject Outlines for Year 10

Year 10 English (Standard)

Term One	Shaping Engaging Stories – The extraordinary and the everyday
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The focus for this term is engaging stories. Through the study of autobiographies and the novel *The Killer's Tears*, students will learn about the use of language and the way that interesting and unexpected characters and experiences are created through popular texts. Students will create their own original autobiographical narrative as well as examining a range of themes in narratives created by others.

Term Two	Life's Challenges
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This term's work will develop students understanding of challenges in our world today. Texts produced across different time periods and in different contexts often deal with individuals struggling with personal issues and issues that face them in their world. Students will explore a feature film and the novella *Of Mice and Men*. At the end of Term Two they will complete an exam based on the skills and knowledge gained in English in Semester One.

Term Three	Social Justice
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Social injustices are ever present in our world. The focus for this term is to delve into the behaviours of human kind and examine issues of social responsibility. The two main focus points for this term are the play *An Inspector Calls* and learning and perfecting the skills behind persuasive writing and speaking.

Term Four	Documentary – Are they really real?
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How 'real' can a documentary really be? This term we examine the visual genre that is documentary. We will focus on the ways that Australians are represented in the media today, we examine just how 'real' these texts can be. Students will also explore the conventions of feature length documentary and the way it encourages the audience to view different social groups. At the end of Term 4, students will complete an exam based on the skills and knowledge gained in English throughout the year.

Year 10 English (Extended)

Term One	Horror
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The purpose of this unit is to build up students' skills and understandings for them to create their own story in the horror genre as part of a class anthology. This unit will develop students' wider skills and understandings in relation to literary texts. They will develop their ability to discern shades of meaning, symbolism and the more subtle aspects of storytelling. Students will develop their mastery over language both in creative contexts as well as in analytical forms.

Term Two	Tragedy
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The purpose of this unit is to understandings of the literary traditions of our culture. This unit will give students a strong grounding for future studies in this subject. By engaging with this unit, students will see how the stories we still tell have their patterns in age-old literature. Additionally, students will develop their analytical writing skills as well as their ability to convey information in innovative ways.

Term Three	War
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The purpose of this unit is to build students skills and understandings of language in poetry and prose in the context of war, and to hone their understandings of context in literary production and reception. This unit will give students a strong grounding for future studies, particularly in relation to poetry. They will have opportunities to further develop your mastery of analytical as well as creative writing.

Term Four	Sport
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The purpose of this unit to develop students' skills and understandings of reading expository texts and viewing feature films. Through the context of sport, students will engage in critical thinking by examining the cultural effects of sport and the way sport both reflects and shapes the values of Australian society. Through the study of films in the sports movie genre, students will be able to recognise common film codes and conventions, and apply their critical thinking by considering how these films shape their own attitudes.

Year 10 Health & Physical Education

Term One

PRACTICAL: Swimming and cricket are the major sports covered in Term 1. Pool safety, stroke development and technique are the focus throughout the swimming unit. During the cricket unit, a focus on striking and fielding forms the basis for the assessment. Students begin to explore the ability to transfer learned skills to new activities.

HEALTH: Mental Health is the topic in Term 1 with students required to consider the major causes and impact of mental health issues. The benefits on mental wellbeing of developing strong relationships and regular physical activity are covered. Students also look into the various types of mental illness in today's society.

Term Two

PRACTICAL: Invasion and invasion sports are covered, with soccer being the focus sport for the practical assessment. Students begin to explore the importance of evaluation, selection and implementation of responses based on changing conditions in a sporting context.

HEALTH: Students look at the importance of healthy eating and nutrition. The major sources of carbohydrates, fats and proteins to provide energy and muscle repair form the basis of this unit. The students then analyse their own energy intake and expenditure in the research assignment.

Term Three

PRACTICAL: Students participate in Touch Rugby as the focus sport, and on field leadership is explored. They are required to incorporate various skills and strategies in order to improve team performance in this context. Athletics safety and technique is also revisited.

HEALTH: Students analyse the key areas of fitness. Cardio respiratory endurance, muscular strength, core strength and flexibility are examined. Students are required to design a balanced fitness routine, incorporating these key aspects.

Term Four

PRACTICAL: Students take part in the Sports Management Program. The focus is on communication skills that support and enhance team cohesion, such as body language and listening skills. 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 in Year 10 and the students are required to take a more active role in the administration of the program.

HEALTH: In the Party Safe unit, the focus is on strategies to stay safe and minimise risk in a social context. Planning safe social activities, and budgeting for activities is covered in this part of the course.

Year 10 Humanities & Social Sciences

In Year 10 Humanities and Social Sciences consists of Civics and Citizenship, Economics and Business, Geography and History on a termly rotation basis.

Topic One Civics & Citizenship

Through **Civics and Citizenship**, students continue to build on their understanding of the concepts of democracy, democratic values, justice, and rights and responsibilities by exploring Australia's roles and responsibilities at a global level and its international legal obligations. They inquire in to the values and practices that enable a resilient democracy to be sustained.

Topic Two Economics

In **Economics**, students are introduced to the concept of economic performance and living standards while continuing to further their understanding of the concepts of making choices, interdependence, specialisation, and allocation and markets through contemporary issues, events and/or case studies delving into the reasons for variations in the performance of economies. They explore the nature of externalities and investigate the role of governments in managing economic performance to improve living standards. They inquire into the ways businesses can manage their workforces to improve productivity.

Topic Three Geography

In **Geography**, students will continue the study of the concepts of place, space, environment, interconnection, sustainability and change. The course will focus on the management of environmental resources and the geography of human wellbeing at the full range of scales, from local to global and in a range of locations.

Topic Four History

In **History**, students develop their historical knowledge and understanding through key concepts, including evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts are investigated within the historical context of the modern world and Australia from 1918 to the present, with an emphasis on Australia in its global context.

Year 10 Mathematics (Standard)

Term One

Topic 1 – Number skills

BIMDAS, directed number, Squares, cubes (with directed numbers), Converting between fractions, decimals, percentages, Fractions: improper, equivalent, simplifying, multiplying (for substitution in algebraic expressions), percentages

Topic 2 – Indices

Simplify algebraic products and quotients using index laws, Writing large and small numbers in scientific notation

Term Two

Topic 3 – Patterns and Algebra

Factorise algebraic expressions by taking out a common algebraic factor, Applying the four operations to simple algebraic fractions with numerical denominators, Expand binomial products and factorise monic quadratic expressions using a variety of strategies, Substitute values into formulas to determine an unknown

Topic 4 - Trigonometry and Pythagoras

Solve right-angled triangle problems including those involving direction and angles of elevation and depression, Pythagoras' theorem and trigonometry to solving three-dimensional problems in right-angled triangles

Term Three

Topic 5 – Statistics

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.

Topic 6 – Linear Models

Substitute values into linear function to obtain coordinates and to draw graphs, Substitute values into linear function to obtain coordinates and to draw graphs, sketching graphs from x and y intercepts, finding equation from graph using rise and run and y-intercept, finding equation from gradient and coordinate and from two coordinates, distance between two coordinates, midpoint of two coordinates, parallel and perpendicular lines

Term Four

Topic 7 – Measurement

Solve problems involving surface area and volume for a range of prisms, cylinders and composite solids, Solve problems involving surface area and volume of right pyramids, right cones, spheres and related composite solids

Topic 8 – Inequalities and Simultaneous Equations

Solve linear inequalities and graph their solutions on a number line, Solve linear simultaneous equations, using algebraic and graphical techniques including using digital technology.

Year 10 Mathematics (Extended)

Term One

Basic Algebra Functions

Expand expressions involving brackets, Simplify numeric and algebraic expressions involving fractions, brackets, and negative terms, Factorise expressions using common factor, difference of perfect squares, Solve linear equations, Transposing (rearranging) formulae, Solve linear inequalities, Develop and use the midpoint formula, Develop and use the distance formula

Linear Functions

Solve Simultaneous Equations using substitution and elimination methods, Determine the gradient and equation of a line given 2 points, Determine equations of parallel and perpendicular lines, horizontal and vertical lines, Finding the equation of a line from a graph and from a table of values, Sketch graphs of linear functions, Determine algebraically whether or not a point is on a given line

Trigonometry

Simplify expressions involving surds

Term Two

Trigonometry

Solve right triangles using SOHCAHTOA and Pythagoras theorem, Use Sine & Cosine rules, Solve problems involving angles of elevation & depression, Solve problems involving compass bearings, Determine and use exact values for 30, 45 and 60 degrees, Develop and use the formula for the area of a triangle $A = \frac{1}{2}ab\sin C$, Solve problems involving rates such as speed/distance and time

Geometry

Solve problems involving geometric properties of parallel lines, triangles, angles in a straight line, justifying each step, Construct proofs involving above geometric properties such as the exterior angle theorem, Construct proofs involving congruent triangles, recognising which condition SSS, SAS, ASA, AAS or RHS is involved.

Quadratic Equations

Review factorisation and factorise trinomials

Term Three

Quadratic Equations

Solve quadratic equations using the null factor law, Complete the square of a quadratic expression and use this factorize trinomials and solve associated equations, Develop and use the quadratic formula, Solve word problems, including simultaneous problems involving quadratic equations

Probability

Understand and use set notation and the concepts of union, intersection, complement, empty, mutually exclusive events, Represents using Venn diagrams, Determine the probability of events from sample spaces, Understand and use the addition principle, Draw Venn Diagrams and use them to determine probability of events, Draw 2-way tables and use to determine probabilities, Draw tree diagrams determine probability of events.

Quadratic Functions

Understand and use function notation, Recognize quadratic expressions/functions/equations and be able to rearrange into form $ax^2 + bx + c$, Understand the transformations associated with the completed square form of a quadratic $y = a(x - h)^2 + k$, and state line of symmetry, turning point, vertical dilations and concavity, Understand the intercept form of a quadratic $y = a(x-p)(x+q)$, and determine the x intercepts, line of symmetry and turning point, Determine whether these functions are concave up or down. Determine whether a quadratic function has a local max or min, Determine the rule for a quadratic graphs either of the forms above, Model situations using a quadratic function, Classpad skills: Solve simultaneous equations, Use GSOLV facility to examine properties of graphs of functions.

Term Four	
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Indices and Exponential Functions

Determine whether sequences are linear, quadratic or exponential and determine rules for any of these, Understand the significance of a and r in exponential functions of the form $y = ar^x$, Determine the initial value, whether growth or decay and the % change occurring in an exponential function, Solve problems involving exponential growth and decay, including those involving compound interest, Understand and use the Index laws, Simplify expressions involving indices (including those with negative and fraction powers), Solve exponential equations that reduce to the form $a^x = a^y$, Sketch graphs of exponential functions, Recognise the general shape of the graph of an exponential function and identify any vertical dilations, reflections (in x or y axis) and vertical translations, Determine the rule for an exponential graph, Solve simultaneous equations involving exponential functions, Classpad skills: In main menu, solve equations and simultaneous equations involving exponentials, In Graph and Table, solve problems involving problems involving exponential and other functions.

Circular Functions

Understand and use the unit circle to determine sine, cosine and tangent of angles $0 < x < 360^\circ$, Draw graphs of $y = \sin(x)$, $y = \cos(x)$ and $y = \tan(x)$ $0 < x < 360^\circ$

Year 10 Religious Education

Term One | **Restoring God's Justice in the World**

1. God created in people a concern for justice
2. Human injustice in the world
3. Jesus – the realisation of God's justice
4. Jesus restores justice in people's hearts
5. Jesus calls Christians to promote social justice
6. The Church promotes social justice

Term Two | **The Search for Freedom**

1. Freedom to make responsible moral choices
2. How can people know if their choices are morally good?
3. God begins to restore human freedom
4. God revealed the Old Law
5. Jesus gave the New Law of freedom
6. The New Law of true freedom
7. The sacraments of true freedom

Term Three | **The Holy Spirit's action through Conscience and the Church**

- a. Conscience
 1. Alone with God
 2. Making judgements of conscience
 3. The four principles of conscience
 4. Challenges to recognising the voice of conscience
 5. Jesus promised the Holy Spirit to guide conscience
- b. The Church
 1. The characteristics of the Church
 2. The growth of the Church
 3. The renewal of the Church through the Holy Spirit

Term Four | **Vocation – called to be and become**

1. The basic human vocation
2. Discovering personal vocation
3. The Christian vocation
4. Marriage is a vocation
5. Ministerial priesthood is a vocation
6. Religious life is a vocation
7. Life Everlasting

Year 10 Science

The Extended and Standard classes rotate each term into a new topic and teacher. Specialised teachers teach each of the units. The difference between the content between Level 1 and Level 2 and Level 3 classes is the depth of understanding and level of difficulty of the problems.

Topic One **Biology**

The transmission of heritable characteristics from one generation to the next involves DNA and genes:

- describing the role of DNA as the blueprint for controlling the characteristics of organisms
- using models and diagrams to represent the relationship between DNA, genes and chromosomes
- recognising that genetic information passed on to offspring is from both parents by meiosis and fertilisation
- representing patterns of inheritance of a simple dominant/recessive characteristic through generations of a family
- predicting simple ratios of offspring genotypes and phenotypes in crosses involving dominant/recessive gene pairs or in genes that are sex-linked
- describing mutations as changes in DNA or chromosomes and outlining the factors that contribute to causing mutations

The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence:

- outlining processes involved in natural selection including variation, isolation and selection
- describing biodiversity as a function of evolution
- investigating changes caused by natural selection in a particular population as a result of a specified selection pressure, such as artificial selection in breeding for desired characteristics
- relating genetic characteristics to survival and reproductive rates
- evaluating and interpreting evidence for evolution, including the fossil record, chemical and anatomical similarities, and geographical distribution of species

Topic Two **Chemistry**

The atomic structure and properties of elements are used to organise them in the periodic table

- recognising that elements in the same group of the periodic table have similar properties
- describing the structure of atoms in terms of electron shells
- explaining how the electronic structure of an atom determines its position in the periodic table and its properties
- investigating the chemical activity of metals

Different types of chemical reactions are used to produce a range of products and can occur at different rates

- investigating how chemistry can be used to produce a range of useful substances such as fuels, metals and pharmaceuticals
- predicting the product of different types of simple chemical reactions
- using word or symbol equations to represent chemical reactions
- investigating the effect of a range of factors, such as temperature and catalysts, on the rate of chemical reactions

Topic Three	Physics
<p>Energy conservation in a system can be explained by describing energy transfers and transformations</p> <ul style="list-style-type: none"> • recognising that the Law of Conservation of Energy explains that total energy is maintained in energy transfer and transformation • recognising that in energy transfer and transformation, a variety of processes can occur, so that the usable energy is reduced and the system is not 100% efficient • comparing energy changes in interactions such as car crashes, pendulums, lifting and dropping • using models to describe how energy is transferred and transformed within systems <p>The motion of objects can be described and predicted using the laws of physics</p> <ul style="list-style-type: none"> • gathering data to analyse everyday motions produced by forces, such as measurements of distance and time, speed, force, mass and acceleration • recognising that a stationary object, or a moving object with constant motion, has balanced forces acting on it • using Newton's Second Law to predict how a force affects the movement of an object • recognising and applying Newton's Third Law to describe the effect of interactions between two objects 	

Topic Four	Earth & Environmental Science
<p>The universe contains features including galaxies, stars and solar systems and the Big Bang theory can be used to explain the origin of the universe</p> <ul style="list-style-type: none"> • identifying the evidence supporting the Big Bang theory, such as Edwin Hubble's observations and the detection of microwave radiation • recognising that the age of the universe can be derived using knowledge of the Big Bang theory • describing how the evolution of the universe, including the formation of galaxies and stars, has continued since the Big Bang • The universe contains features including galaxies, stars and solar systems and the Big Bang theory can be used to explain the origin of the universe <p>Global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere</p> <ul style="list-style-type: none"> • investigating how human activity affects global systems • modelling a cycle, such as the water, carbon, nitrogen or phosphorus cycle within the biosphere • explaining the causes and effects of the greenhouse effect • investigating the effect of climate change on sea levels and biodiversity • considering the long-term effects of loss of biodiversity • investigating currently occurring changes to permafrost and sea ice and the impacts of these changes • examining the factors that drive the deep-ocean currents, their role in regulating global climate, and their effects on marine life 	

Industry & Enterprise Programme	
Practical Option	
<p>This subject is a compulsory second major for students enrolled in the Industry and Enterprise Programme. Students will be involved in a range of projects which assist with the development of workshop skills and tradesman type skills eg building and construction, bricklaying, paving and landscaping. It complements the Vocational Education course where students complete a TAFE certificate in Building and Construction, log book training, preparation for, and evaluation of work experience, a careers education programme, development of IT skills and life skills modules. Please note a letter has been previously sent inviting students to join the Industry and Enterprise Programme for Year 10. If you have accepted a position in the programme, you are required to select this option.</p>	

Industry & Enterprise Programme	
English	
Term One	The World of Work
<p>The focus for this term is the world of work. Students will explore the ideas behind the changing world of employment, rights, responsibilities and working conditions in workplaces in both Australia and around the world. Throughout the term, students will examine a range of different texts including the novel 'The Dead I Know,' articles, visual texts and fact sheets.</p>	

Term Two	What Does it Mean to be a Man
<p>In this unit, students will explore the expectations that are placed on groups in our society, with a focus on masculinity. We will look at what it means to be a hero or a role model in our world and the values, behaviours and attitudes that we admire in these people. Students will use moviemaking software to create a presentation on an appropriate role model of their choice.</p>	

Term Three	Getting Ready For Work
<p>The focus for this unit will be preparation for the job seeking process. Many students will be looking for some form of employment in the very near future, whether in a part time or casual position, or later on in full-time employment. We will practise our letter-writing, undertake mock interviews and write résumés to make sure students present themselves in the best possible way.</p>	

Term Four	What's Your Opinion
<p>We all have opinions about events in our world. This unit gives students a chance to form informed opinions, conduct research and present their ideas in an intelligent, logical and convincing way. We will explore important issues at a local, national and global level and look at what we can do to take action against these issues.</p>	

Industry & Enterprise Programme

Mathematics

Term One

- Reviewing basic numeracy skills using real life applications:
- Addition, subtraction, multiplication, division
- Place value, size of numbers
- Fractions, decimals, percentages
- Units of measure, conversions
- Maths in Construction
- Decimals
- Units of measure
- Length, Width, Area
- 3D Measurement - Surface Area
- How much? (wood, paint, cost etc)

Term Two

Maths in Sport

- Collecting data
- Tables
- Graphs
- Chance
- Probability

Term Three

Maths in the Workplace

- Percentage decrease/increase
- Wages
- Commission
- Income tax
- Best buys
- Simple interest

Term Four

Everyday Maths

- Ratio
- Scale
- Maps
- Bearings
- Speed
- Distance
- Time
- Timetables (train, bus etc)

Industry & Enterprise Programme

Mathematics

Students enrolled in the Industry and Enterprise course will be undertaking Science studies in an Outdoor Education context.

Term One

During this term students will complete the theory and practical components of the Bronze Medallion. They will develop practical competence in Resuscitation, Recover and Resuscitation, Spinal Injury turn, Rescue Initiative & Report. They will need to learn to swim 400m using a variety of strokes, perform a variety of rescues, develop defensive & escape techniques, do a contact tow. They learn how to respond in emergencies and learn about Water Safety & Hazard Identification.

Term Two

In Term 2 students learn Outdoor Education skills in the context of Bush Walking and Camping. These include: rules and regulations, fitness requirements, equipment, being prepared, food and water, shelter, DEC, local wilderness, packing a backpack, camping 1st aid, packing a backpack, fire safety, OHS processes and camping/hazard identification/application of OHS practices, food/water/clothing requirements, communication tools, tent and hutchies, no trace principles of campsite, bush cooking and equipment.

Students also learn about urban and wilderness 1st aid and how to treat sprains, strains, dehydration, hypothermia, burns, asthma, blisters, bee stings, snake bite, headache. They also learn about navigation and how to use the sun, compass, maps, history, watch, an orienteering. Students will complete an Expedition trek along the Bibbulmun Track.

Duke of Edinburgh: Students are introduced to the Duke of Edinburgh program and explore the four components (Service, Physical Recreation, and Skill & Adventurous Journey).

Term Three

The focus for this term is Biology, where students look at Plant and animal diversity in Australia, the environment, flora and fauna, marine ecosystems, forest ecosystems, producers, consumers, decomposers, food webs and food chains. In the DNA and Genetics topic students will learn about cells, characteristics and inheritance, natural selection and evolution and in the Forensic Science topic they will look at crime scenes, victims and suspects, fakes and extortion.

In the Outdoor Ed component of the term they focus on mountain bike riding where they learn about the equipment, storage, care, protection, types of skills and attack position. The specific mountain biking skills covered include braking, body position, ascending, descending and cornering.

Students will complete a biking Expedition to Munda Biddi.

In the Duke of Edinburgh component students will be required to do two (2) service opportunities and log their hours, review their progress and book/allocate time for further opportunities.

Term Four

The content topic for this term is Structures where students learn about forces, balance, gravity, mass, weight, compression, tension, stress, towers and skyscrapers and bridges.

During this term students will complete a St. Johns 1st Aid Certificate.

In the Duke of Edinburgh component they are required to complete 1 service opportunity, log their hours, review progress and book/allocate time for further opportunities.

Students will also complete an overnight Trek.

Year 10 Arts Options

Art

(Major / Minor)

Although this subject has no pre-requisite it does build on ideas and skills covered in Years 8 and 9. Students choosing either of these courses require some degree of competence to cope with the level expected and will be challenged to produce creative work in clay, plaster, paints, ink and a variety of drawing media.

In both the major and minor areas, art appreciation is covered in preparation for the Year 11 Art course however; emphasis is on the development of practical skills. Students will complete creative work in the areas of sculpture, printmaking, graphics and ceramics whilst developing their practical skills in using a variety of advanced media including computer 'image manipulation' software.

Drama

(Major)

This course builds on skills introduced in previous years but is open to committed and enthusiastic new students. It will provide a firm background for further study in the areas of production, performance and design as well as adequately preparing you for Drama in Year 11. The course includes playwriting and developing performances for the continuation of the Lunchbox Theatre Company. There will be an introduction to analyzing a play for performance and students will also extend skills in improvisation, scripted drama and technical theatre. Students will have a number of public performance opportunities throughout the year including: The Lunchtime Plays, the Catholic Schools Performing Arts Festival and Variety Nights. While the emphasis is on practical workshops and performance work, theoretical work begins to play a fundamental role in providing students with a deeper knowledge and understanding of their drama works and processes. A practical exam is included in first semester, and students sit a written exam in second semester.

Music Technology

(Major / Minor)

This course has its focus on musicianship, composition, performance, digital music technology and production skills such as recording, promotion and stage management. Project assessments include composing music to media, remixing, recording individual and group performances, and developing music industry vocational skills. The study of these areas will culminate in a professional CD recording of student devised performance work. Students are involved in all elements of the CD project – CD cover design, music composition, CD recording performance, and input into the studio mixing and track mastering. Students will utilise software such as Mixcraft, Logic Pro and Ableton Live. This course is designed to give students an insight into the practical and vocational elements of the music industry. Due to the performance aspect of this course, it is essential that students who take this option also learn a musical instrument, either privately or through the College. Students are also encouraged to play an active role in the department at performances throughout the year in the various college ensembles and bands, to enable them to be eligible for the next Visual and Performing Arts Tour.

Year 10 Design & Technology Options

Electronics

(Major / Minor)

The content and assessment of this course is equally divided between theory and practical work. Students need no prerequisites, however those who have studied Year 9 Electronics would have an advantage. Theory in the course includes electrical safety, electronic principles, understanding and recognition of components, calculations in resistance, capacitance and circuit laws. Students will be required to investigate needs, opportunities and problems that are defined in a design brief. They devise a solution that considers factors such as function, environment, materials, components and parts. As part of this process students will be introduced to elements of design and the use of CAD programs.

Practical work involves the construction of transistor and integrated circuitry on manufactured printed circuit board.

Metalwork

(Major)

This course is designed to encourage students to expand their knowledge of metalworking practices and to extend them to design, develop and construct projects. It is also designed to expand their knowledge of machine tools and specialised metalworking equipment. The major course is designed to provide the solid foundation vital for those students who are looking to take on the Year 11 Materials Design & Technology (Metals) course.

Technical Drawing

(Minor)

This course is designed to enable the student to further develop the knowledge and skills learnt in Years 8 and 9. It is very important that students who wish to choose either Woodwork or Metalwork should also seriously consider Technical Drawing. It is a major component of both courses and the absence of it would prove to be a large handicap to the student. A number of Computer Aided Design exercises are included in the course. Emphasis is placed on the technical correctness of drawings together with the overall visual impact as a graphic communication of a solution to a drawing problem.

Woodwork

(Major / Minor)

This course is designed to encourage students to expand their knowledge of woodworking practices and to extend them to design, develop and construct projects. Before choosing to study Woodwork in Year 10 the student should be aware that this course is the foundation for the Materials Design & Technology (Wood) course in Years 11. It is strongly recommended that any student who wishes to study the subject in Years 11 should opt for it as a major option in Year 10. It is not a prerequisite but the evidence clearly shows that those who choose the subject in Years 11 and 12 without the foundation course in Year 10 are put at a distinct disadvantage.

Year 10 Health & Physical Education Options

Sport Science

(Major)

Term 1

Students examine the functional anatomy of the human body. Structure and function of the skeletal and muscular systems are studied to explain how the human body creates movement. The practical component links this to the sporting movements required in Badminton. Practical assessment is based on skill development, execution and technique.

Term 2

In the exercise physiology unit, students explore the circulatory and respiration systems. They look closely at how immediate and long term changes in these systems occur during exercise and training. Students also explore the health and performance related components of fitness. Soccer is the focus sport, and assessment is based on skill development and movement sequences.

Term 3

The students explore the major biomechanical principles that are found in sports and movement. They use photo and video footage to complete motion analysis and suggest changes to technique and skill execution to improve performance and reduce injury. Modified Lacrosse is the assessable sport, and they investigate the impacts of changes to effort, space and time on performance and quality of outcome.

Term 4

Students investigate the various coaching styles in the motor learning and coaching unit. How athletes move through the phases of learning skills is investigated. They analyse the principles of coaching and teaching skills. Students learn the various ways to modify training activities to suit the ability level of athletes from beginner to expert. In sports psychology, students investigate the importance of mental imagery, confidence and motivation in successful sports performance. Softball is the major assessable sport, with an emphasis on strategic understanding, and skill execution.

Specialised Physical Education

(Minor)

This practical course is offered to students who enjoy HPE and want to further develop their skills and strategies. A variety of sports are covered, with Floorball being the focus in Term One. Students are given the opportunity to improve their skills and understanding of the methods to improve performance. In Term Two a combination of invasion/evasion sports are explored, and the ability to transfer tactics and strategies from one context to the next is the major focus. Practical performance in a selected sport forms the basis for student assessment in this course.

Outdoor Education

(Minor)

This course educates students about the environment, in the environment and for the environment. This course will allow your son to explore topics that are essential to interacting in their environment such as navigation, orienteering, bush survival, first aid, minimal impact, hiking, camping, kayaking, mountain biking and rock climbing. Outdoor Education is about learning life skills which are facilitated in the outdoors and the learning objectives of this course include: developing teamwork skills, decision making and problem solving skills, improve communication, instill leadership qualities, and foster initiative and resourcefulness.

Term 1 / Term 3 – Leadership skills, planning food for camping

In the first term of this 2 term course we look at safety, food nutrition and relationships and sexuality. The contexts of the activities are hiking, camping and mountain biking.

Term 2 / Term 4 – Wilderness first aid and emergency first aid

In the second term we look at safety. The contexts of the activities are hiking, camping and mountain biking.

Year 10 Humanities & Social Sciences Options

Business Studies

(Major / Minor)

The course aims to provide a detailed study of business concepts, to simulate the operation of a small business, and to challenge students to use technology to create innovative business solutions. Topics include: The Sharemarket, Commercial Law, Marketing, Product Research and Development, Introduction to Accounting, Master Budgets, Financial Modelling, Management Decision Making and Business Operations. Students in the major course prepare and execute a comprehensive business plan culminating in the production and marketing of product. Through this course students are expected to complete a nationally accredited Certificate I in Business. Studying Small Business should assist students who intend to study Accounting and Finance or Economics in Years 11 and 12, or pursue a career in business. Completion of the Certificate I will greatly assist students who apply for TAFE courses or traineeships.

Year 10 Languages Options

Italian

(Major)

This course builds on ideas, vocabulary and grammar structures acquired in Year 9 and is designed to provide students with the necessary skills to communicate at a conversational level with native speakers in both written and spoken exchanges. Students who choose to study Italian in Year 10 will deal with various topics and emphasis is placed on a wide range of practical activities including role-plays and games. The cultural and background content is further encouraged through multi-media, audio-visual programmes, wide reading and excursions and incursions. Students who are contemplating Italian in Years 11 and 12 must choose Italian in Year 10.

Year 10 Information Technology Options

Information Technology

(Major / Minor)

This course is designed to meet the needs of those students who are interested in, Design Programming and Multimedia Authoring. It is recommended for those students who wish to choose Computer Science, Applied Information Technology or Design courses in Years 11 and 12.

Students will gain experience in graphic and web site design, programming, audio and video editing, image manipulation, 3D modelling, 2D and 3D animation. Students will use software that enables the interactive use of text, audio, still images, video, graphics and music. Tasks are based around real world applications such as TV/Radio, programming design, commercial advertising, marketing and social networking technologies, such as Face book and MySpace.

Term 1

In Term 1 we take a serious look into the elements and principles of design in preparation for upper school courses. Students will continue to develop their skills in Photoshop and design theory. Students complete a topic test and a production task on creating a logo for an upcoming event.

Term 2

In Term 2 we focus on animation and scripting skills in Flash while continuing to develop students understanding of design theory and project management. Assessment for the term involves a class version of the Impossible Quiz and an exam.

Term 3

In Term 3 we look into website development starting with an understanding of HTML and CSS before using Dreamweaver to create well designed and functional websites. This term there is a topic test and a website development project.

Term 4

In Term 4 students conduct a term long project on a market campaign. They will develop their design theory skills, their application skills and project management skills to create a multimodal marketing campaign including a logo, flyers, a video and a functional website for a business.

Computer Programming

(Major)

The intention of the Computer Programming course is to teach students fundamental skills in programming so they can compete in a digital world. As we include more technology into our lives it is a valuable skill to be able to interact with and create programs for computers, smart phones and future technologies.

Term 1

In Term 1 students are introduced to the fundamentals of computer programming through the JavaScript programming language through a series of tutorials and challenges. They will keep a record of their work in a digital portfolio and finally build an interactive website that uses JavaScript. Students will be assessed on their portfolio, their website and a topic test.

Term 2

User Interface Design is the focus throughout Term 2. Students begin the term learning HTML and CSS. They then learn about the principles and elements of design, user interface and usability. The major assessment for the term is a design based project where students design a responsive interface. There is also an exam that covers content from Term 1 and 2.

Term 3

Term 3 begins with a unit on databases where students use Microsoft Access to create a functional database. This is followed by a short unit on hardware where students learn about the physical components that make up a computer system. Finally they use their programming skills to create apps that work on the Raspberry Pi system.

Term 4

In Term 4 students use Android Studio to complete a number of tutorials that teach them the fundamental concepts about Android development. They work in teams to plan and develop an app for Google Android devices using the SDK. Through this project students learn about the app development process and the different roles performed within the industry.

