

# YEAR 10 Supplement 2025

This supplement is to be used in conjunction with the Senior Pathways Information Book. This information is specific for 2025 subject selections and is aimed to clarify the number of subjects required for Year 10.

# YEAR 10 2025

#### CORE SUBJECTS

- Unit 1 Religion & Society
- English
- Maths (Must select Maths pathway)
- Science (Must select one Science subject)
- Humanities (1 semester)
- STRIVE

#### ELECTIVES

Students will pick **5 Elective subjects** as well as **3 Reserve subjects**.

NOTE: Languages and Unit 1&2 selections take up 2 Elective slots as they continue for the full year. Students are advised to use their reserve selections wisely as they are likely to be allocated at least one reserve.



# Year 10 Curriculum

In Years 7 to 9, students experience a curriculum which is based on the principle of a comprehensive core of subjects which cover all the key learning areas. As students move closer to their senior student years, it is appropriate to allow them some choice in the curriculum.

The two blocks of study are:

- Block 1: Core
- Block 2: Elective Studies

These blocks are designed to ensure that students have access to all of the learning areas while also offering them the chance to develop their academic aptitude, skills and interest in specific areas.

This should equip students with the academic skills and experiences to draw upon when making choices for their senior secondary years in Year 11 and 12.

#### **TIMETABLE FOR 2025**

The Loreto College Ballarat timetable is based on a 6 period day. Each period runs for 48 minutes. There are 60 periods in a cycle. Each cycle runs over two weeks.

The following outlines the period allocation and structure of each of the blocks of study.

#### **BLOCK 1: CORE**

All Year 10 students will study the following Core studies in 2025

- RELIGION AND SOCIETY Unit 1
- Unit 1 9 Periods per fortnight for 1 Semester
- ENGLISH

9 Periods per fortnight

- MATHEMATICS 9 Periods per fortnight
- Mathematics A OR
- Mathematics B OR
- Maths for Living

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- Prime Mathematics \*Students will be invited to enrol in Prime Mathematics
  - HUMANITIES 9 Periods per fortnight for 1 Semester
  - SCIENCE (must choose 1 science) 9 Periods per fortnight (for 1 semester)
- STRIVE
  4 Periods per fortnight

STRIVE recognises the need for students to maintain a balance between academic study and health and wellbeing. Individual units within the STRIVE program, focus on one of five key areas:

- Physical Activity
- Recreational Pursuits
- Health and Wellbeing Pathways and
- Careers

#### **BLOCK 2: ELECTIVE STUDIES**

All Year 10 students will study their chosen electives for 9 periods per semester.

The aim of this block of studies is to provide an opportunity for students to:

- · Extend and further develop the skills and knowledge introduced to them in the Core
- · Study certain topics or learning areas in more detail
- Provide a pathway to senior secondary studies including the studey of VCE Units 1 & 2

While most of the Elective Studeis are semester length units, there are some studies wich run for the full year eg: Languages and VCE Units 1 & 2.

# COTS YEAR 10

SUBJECT LIST:



**AGRICULTURAL & HORTICULTURAL SCIENCE** ART BIOLOGY CHEMISTRY COMMERCE DANCE DRAMA ENGLISH **ENGLISH LANGUAGE ENVIRONMENTAL SCIENCE** FOOD TECHNOLOGY **FUTURE SKILLS GEOGRAPHY** HEALTH HISTORY **INFORMATION TECHNOLOGY INTERNATIONAL STUDIES/ GLOBAL POLITICS LEGAL STUDIES** LANGUAGES - FRENCH LANGUAGES - JAPANESE LITERATURE **MATERIALS & TECHNOLOGY** MATHEMATICS MEDIA MULTIMEDIA MUSIC PHILOSOPHY PHYSICAL EDUCATION PHYSICS **PRODUCT DESIGN AND TECHNOLOGY PSYCOLOGY RELIGIOUS EDUCATION** SPORT SCIENCE SOCIOLOGY THEATRE DESIGN AND TECHNOLOGY **VET CERTIFICATE II IN CREATIVE INDUSTRIES VISUAL COMMUNICATION & DESIGN** 

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## **RELIGIOUS EDUCATION**

#### YEAR 10 CORE: VCE Religion and Society Unit 1

Students complete Unit 1 in Year 10 with the unit completed in one Semester

**Unit 1: The role of religion in society** - In this unit students explore the spiritual origins of religion and understand its role in the development of society, identifying the nature and purpose of religion over time. They investigate religion, including the totality of phenomena to which the term 'religion' refers, and acknowledge religion's contribution to the development of human society. They also focus on the role of spiritualities, religious traditions and religious denominations in shaping personal and group identity over time. Students examine how individuals, groups and new ideas have affected and continue to affect spiritualities, religious traditions and religious denominations. The unit provides an opportunity for students to understand the often complex relationships that exist between individuals, groups, new ideas, truth narratives, spiritualities and religious traditions broadly and in the Australian society in which they live.

#### YEAR 10 ELECTIVE: Philosophy (Elective / One semester)

How do you know for certain that you are here? What if someone told you that you were just a Sim in a cosmic game, that all this was just a dream? Can you know? What is the nature of reality? Is there a God? What is truth? How can we achieve certain knowledge? What is good and what is evil? These are some of the questions which have challenged humans for millennia and underpin ongoing endeavors in areas as diverse as science, justice and the arts.

This unit will introduce you to fundamental philosophical problems through active, guided investigation, and critical discussion of three key areas of philosophy: metaphysics, epistemology and ethics. The emphasis is on philosophical inquiry – 'doing philosophy' –You will be part of multiple "communities of inquiry" to explore ideas relating to contemporary society and our everyday lives. Ideas will be explored through reading articles, watching films, documentaries, discussions and other means.

This unit will engage you in philosophical inquiry across three key areas of philosophy:

- Metaphysics
- What does it mean for something to exist?
- Are you really here?
- Does everything have a cause?
- What is ultimate reality? What is the concept of nothing?
- How does the idea of God relate to existence and non-existence?
- · What are we? What is the basis of our existence and our consciousness?
- Epistemology
- What is truth?
- What things can be known?
- · What is the relationship between knowledge and belief?
- Should we trust our senses?
- Ethics
- What is good and evil?
- Who decides?
- What is justice?
- What is the "good life"?

If you do this elective unit it will provide some background for VCE Religion & Society Unit 2 and 3-4 Studies in Years 11 and/or 12.

## **ARTS**

#### YEAR 10 ELECTIVE: Art (Elective / One semester)

In this course you will have the chance to explore a range of new and exciting art processes and materials. You will be able to develop your skills through a wide range of creative experiences. You will experiment with innovative Photographic techniques, create Sculpture from discarded materials and discover Painting, Drawing and Printmaking approaches that use mature and sophisticated approaches that will enhance your ability to express yourself. Using a range of Ceramic techniques you will create functional and decorative work and you will investigate the world of Jewellery and Design.

To enrich your knowledge of the world of art we will visit a range of exhibitions and galleries and we will uncover the history of significant art movements and the story of major artists and their work. You could study this course for a whole year or for just one semester. It would be useful for students who wish to improve their art skills and their understanding of the world of Art and is highly recommended for those considering Art or Studio Arts in the VCE.

Assessment types: Folio, Workbook / Visual Diary, Semester Examination

#### YEAR 10 ELECTIVE: Dance (Elective / One semester)

The Year 10 Dance combines aspects of VCE Dance and Theatre Studies giving students a broad pathway for either subject in Year 11. Students would be introduced to a range of skills and concepts that would assist both Dance and Theatre studies at the VCE level including:

- · Production processes how do I get from the page to the stage
- Choreography and movement for group and solo works
- · Stagecraft design such as costume, set and lighting, production technologies
- The creative approach to both learnt and choreographed or devised dance and drama works.

At the beginning of the semester, students will be given the opportunity to select their production emphasis of either Dance or Drama Students enabling them to further delve into the theoretical components of dance and theatre terminology and analysis. This will enable students to select either a dance or physical theatre solo piece. Examination technique will be taught and theoretical aspects of the course will be assessed through an end of semester examination.

**Assessment types:** Group Dance/Theatrical Choreography task, Solo Dance/Theatrical Choreography task, Written Analysis of Dance Movement piece, Written presentation of self-devised Narrative, Terminology and Stagecraft regular testing, Semester Examination

#### YEAR 10 ELECTIVE: Drama (Elective / One semester)

Year 10 Drama allows students to explore their own and others' worlds in performance. Through group work students develop their ability to collaborate with others and they also follow through a production process from beginning to end, which involves many stages and much building of skills and development of ideas.

Students will be developing their skills in improvisation, acting technique and expressive skills. The study of theatre history and performance styles, will also be incorporated into the development of performance. Students will also have the opportunity to attend and analyse a live professional performance.

Assessment types: Ensemble performance, evaluation of performance, drama workshops, semester examination.

#### YEAR 10 ELECTIVE: Media (Elective / One semester)

In this course, students will explore and learn about media production skills including video editing and photography using industry standard programs including Adobe Creative Cloud and media technologies such as Digital SLR and video camera functions. Working in groups and individually to complete projects, students will design and create media projects based on a genres and or themes and issues. Learning how to discuss the codes and conventions of media you will analyse media texts which may include films and TV, social media, documentaries and photography. Students interested in making media both from a creative and technical perspective will learn how to convey ideas and stories that interest them. These skills and knowledge support students in the VCE Media Unit 1-4 pathway and provide critical and creative thinking opportunities related to media industries.

Assessments: Group music video task, Group narrative video task, Representations presentation, Narrative SAC.

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# **ARTS CONTINUED**

#### YEAR 10 ELECTIVE: Music Exploration (Elective / One semester)

This unit enables students to develop and practise musicianship through performing, arranging, analysing and responding to music from a wide range of eras, cultures and styles. Students will use their instrument, voice, classroom percussion and technology in a flexible and collaborative way when undertaking this unit of study. The performance component of this unit will be weighted towards group performance with only a small solo performance component.

This subject is intended for any student who is interested in developing existing practical musical skills and knowledge. It is also available to students who have had more informal training on an instrument (ie self taught, have sung in a choir etc) but are willing/wanting to build and work on skill development. This course can be studied as an enrichment course or as a pathway to VCE music and tertiary studies.

Assessment: Performance, creation/recreation task, analysis and responding examination.

#### YEAR 10 ELECTIVE: Theatre Design and Technology (Elective / One semester)

The theatre design and technology program is for students interested in the areas of theatre design; costume design, make-up design and effects, scenic art and design, sound design and technology, properties design and construction, and lighting design and technology. Students will explore more advance DMX programing, prosthetic sculpting and molding, basic design programmes and 3D printing. Whilst this course has a design focus, students will be required to do some unassessed acting to enable effective design presentation. This elective is a great lead into the VCE Theatre Studies course.

#### YEAR 10 ELECTIVE: VET Certificate II in Creative Industries: (Elective / Full year)

This subject provides students with a pathway to a variety of creative industries. Core units of competency include developing and applying creative arts industry knowledge, working with others and work health and safety practices. The focus of this elective is a behind the scenes look at theatre production and event management. Students will develop skills and knowledge in technical applications of stage lighting, props and set design. Students gain experience through working on productions within the college and external events. This elective is a great lead into the VCE-VM pathway.

#### YEAR 10 ELECTIVE: Visual Communication Design (Elective / One semester)

Visual Communication Design Year 10 is suited to students who are interested in learning about the design process used in visual, object and environmental design. In this elective, students will follow the design process in response to a diverse range of briefs, responding to different clients needs, target audiences, contexts and final presentations. Students will experiment with a variety of methods, media and materials, including pencil rendering, technical drawing, painting, model-making, and the Adobe Digital Suite. Students will also build their awareness of how designers use the design elements and principles of design to communicate ideas visually. This area of study will be both practical and theory based which will be presented in a A3 folio.

#### ENGLISH

#### YEAR 10 CORE: English (Core study / Full year)

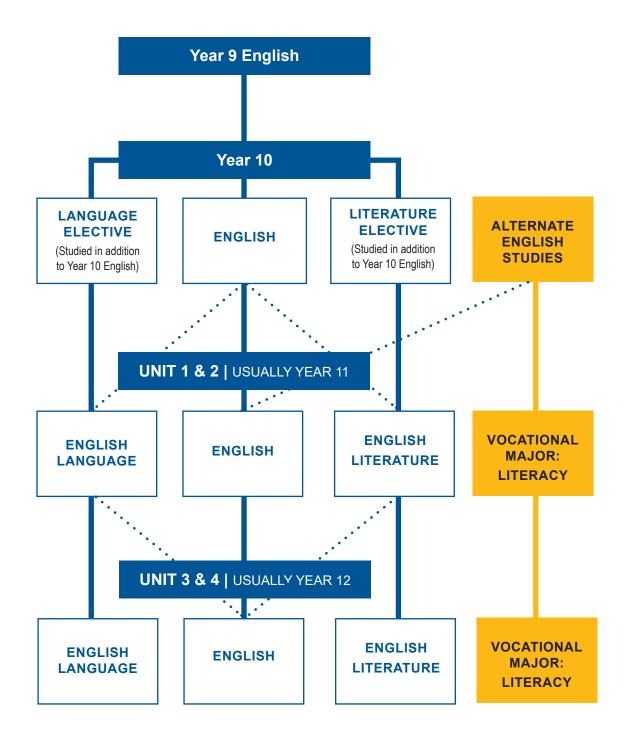
"Understanding texts and recognising how language works within them is necessary for success at school and beyond for an active, informed and fulfilling life in modern Australian society and the global community. By understanding and working with texts students acquire the knowledge, skills and personal qualities that enable them to read, view and listen critically and to think, speak and write clearly and confidently." (Victorian Essential Learning Standards, VCAA, 2005)

In Year 10 English students analyse, interpret, evaluate, discuss, create and perform a wide range of texts. Texts may include various types of media texts such as film, digital and online texts, novels, non-fiction, poetry, dramatic performances and multimodal texts. Students create a range of texts whose purposes may be aesthetic, narrative, reflective, informative, persuasive, analytical and/or critical, for example stories, arguments that include analytical expositions and discussions, analysis and responses that include personal reflections, reviews and critical responses for a range of audiences.

**Assessment:** analytical and creative responses to texts, oral presentations, and writing developed for different purposes, audiences and contexts. Students will complete an End of Semester Examination at the conclusion of Semester 1 and 2 in response to course content, and as preparations for the demands of Senior/ VCE English.

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# **English Pathways**



Students can choose any of the three English subjects regardless of the subjects taken in Year 10, however, it is recommended that those students interested in English Language and English Literature take these subjects at Year 10.

#### **UNIT 1 & 2**

Students **must choose at least one** of the three options but may choose more than one.

#### NOTE: Solid Arrows indicate the most common pathways and the dotted arrows show possible alternatives.

#### UNITS 3 & 4

Students may move between subjects, however, this is not recommended.

# ENGLISH

#### YEAR 10: ALTERNATE ENGLISH PROGRAM (Core study / full year)

**Students will be invited to enroll in the AEP.** The course is intended to meet the needs of students with a wide range of expectations and aspirations and prepare students for VCE. Students will be supported and engaged to develop the skills, capabilities and qualities for educational and personal success.

The key knowledge and key skills will help students develop the ability to interpret and create texts that have purpose, with confidence and fluency. Texts are drawn from a wide range of contexts, including media texts and texts used in daily interactions. The teacher will have the discretion to tailor the course to the needs of the class and focus on literacy skills needed for academic, workplace and social contexts. Students will develop strategies to develop their reading, viewing, writing, speaking and listening skills that will assist them in their senior years.

#### YEAR 10 ELECTIVE: English Language (Elective / One semester)

The study of English Language is informed by the discipline of linguistics and sociolinguistics. It explores the ways in which different varieties of language are used by individuals and groups to reflect our multifaceted identities. Learning about language helps us to understand ourselves, the groups with which we identify, and the society we inhabit.

**Assessment:** You will be assessed on analytical short-answer and extended responses to a range of contemporary texts as well as an expository essay and oral presentation skills.

#### YEAR 10 ELECTIVE: Literature (Elective / One semester)

If you enjoy reading and analysing novels, plays and poetry, and watching and analysing film, you will enjoy Introduction to Literature. The study of literary texts moves beyond reading to enjoyment. It invites you to consider and question your values, to look at other ways of life and to consider how one should live. It is recommended for those who want to study Literature in Units 1 and 2.

**Assessment:** You will be assessed on analytical and creative responses to texts, reviews and oral presentations on texts.

## **HUMANITIES**

#### YEAR 10 CORE: History

In this course students begin by exploring the inter-war years between World War I and World War II. They examine the Treaty of Versailles and how the world could be fighting another world war less than 20 years after the first. Students will study World War II and the Australian experience, specifically the war in the Pacific in depth. Topics explored include; the Japanese expansion, Pearl Harbor, the fall of Singapore, prisoners of war (POWs), Kokoda, the bombing of Darwin and the impacts of war on the home front. Students will then explore the impact that World War II had in the development of the United Nations Declaration of Human Rights.

#### YEAR 10 CORE: Geography

Geographies of Human Wellbeing focuses on investigating why there are vast differences between living standards and experiences at a global, national and local scale. Students examine the different concepts and measures of human wellbeing as they gain an appreciation of the causes of poverty and inequalities that exist between countries, as well as within countries. Students will also explore the impact that the developed world, governments and individuals play in the levels of wellbeing experienced by individuals. Possible topics explored: causes of poverty, international aid and evaluation of aid, United Nations Human Development Indicators, refugees, blood diamonds, levels of disadvantage experienced in Australia.

#### YEAR 10 ELECTIVE: Commerce (Elective / One semester)

Learning to keep track of money is something most people need or want to do at some point of their lives. There are many ways of making money, methods of saving and how to manage the money you have – including budgeting. In this class you will learn skills to help you understand concepts involving personal finance, tax and other Accounting basics. You will also explore how Australian businesses impact on our wealth as a nation, the types of industries people work in and the influence that globalisation has had on Australian workplaces and jobs.

This would be a pathway to Accounting and Business Management. Beyond secondary school this subject may help those students who commence an Accounting, Marketing, or Business degree to name a few.

Topics include: Personal Finance, Budgeting, Saving and Investing, Tax, Accounting Basics, Credit/Debt, Economics, Globalisation.

Assessment types: Folio, Tests, Research Projects, Semester exam

#### YEAR 10 ELECTIVE: International Studies & Global Politics (Elective / One semester)

In this subject students explore the significant days in the 21st century and how they have impacted on the world around us. Students can explore significant leaders and different groups, in society and examine their role in forming the world around us. Also, we would explore and examine the impact of the internet, social media and the use of media to bring about enormous social change. Topics to be explored could be: great power rivalry, emerging powerful nations, the changing nature of war, terrorism and International human rights laws.

This would lead to students completing VCE Units 1& 2 or 3 & 4 International Studies. Beyond secondary school this subject may help students commence university courses in Development Studies, Global Politics and Arts/Law to name a few.

Assessment: Research project, Film analysis, Short answer response questions, Essay, Test, Semester exam

#### YEAR 10 ELECTIVE: Legal Studies (Elective / One semester)

Learning about your rights as teenager in Victoria is the focus of this unit. You will explore how the laws and the systems we have in place to ensure that your rights are respected. You will examine the role of the police and how they ensure your rights are respected as well as the rights they need in order to protect the community. You will visit the Ballarat Magistrates court to gain an understanding of why we need to courts to settle disputes and how the courts work. You will investigate how our law-makers realise we need new laws and how laws are made.

This would be a pathway to Legal Studies and Sociology. Many universities offer courses in Arts/Law. Beyond secondary school this subject may help students who wish to pursue careers linked to the law.

Topics include: Teenage Rights, the role of the Police, Types of Crimes, Civil Disputes, A Day in Court, Punishments and the work of a law-maker.

Assessment types: Folio, Research Project, Tests, Semester exam.

#### YEAR 10 ELECTIVE: Modern History (Elective / One semester)

Genocide - This elective includes a one term study of the Holocaust and the Rwandan Genocide.

**The Civil Rights Movement** - This elective includes a survey of the Civil Rights movement in the USA including the Jim Crow Laws, the KKK, then moving onto key events such as the Little Rock Nine, the Montgomery Bus Boycotts and Martin Luther King Jnr.

**Indigenous Rights and Freedoms** - This elective includes an exploration of the changing rights and freedoms of First Nations Australians from the Stolen Generations through to the Uluru Statement of the Heart.

This would lead to students completing VCE Units 1& 2 Modern History or Units 1&2 Politics. Beyond secondary school this subject may help students commence university courses in History, Development Studies, Global Politics and Arts/Law to name a few.

#### YEAR 10 ELECTIVE: Sociology (Elective / One semester)

Students explore if they are truly independent thinkers and free agents or if they are in fact products of their culture and the society that they live in. Concepts that will be explored in this subject will be the creation of gender and gender roles, the immergence of student's own identity and the impact of culture on people's lives. Students will also examine what popular culture is, the rise of celebrity culture and how these have influenced modern society and people's experience of self.

This would be a pathway to VCE Sociology (Units 1&2, 3&4). Students who are also interested in History and Psychology might enjoy this subject. Beyond secondary school this subject may help those students who commence Arts degrees, social welfare, social work and community development courses to name a few.

Assessment types: Folio, Essay, Short answer responses, Multimedia presentation, Semester exam.

# HEATLH AND PE

#### YEAR 10 ELECTIVE: Sports Science (Elective / One semester)

Students should study Sport Science if they have an interest in Health Science and/or a strong passion for improving personal fitness. This elective links specifically to Units 1-4 of Physical Education in VCE.

Students will increase their knowledge of how to improve both fitness levels and sporting performance through theoretical knowledge and practical activities. Along with increasing their understanding of how the body responds to exercise and training.

Topics: Review of the human anatomy covered in Year 9 Faster, Higher, Stronger with an emphasis on muscles, joints, and joint actions with a view to applying this knowledge to the assessment of fitness and training of the relevant fitness components. Other topics include how we learn and improve our skills (Skill Acquisition & Biomechanics), along with the investigation of how our body produces energy (further building on our knowledge of the food fuels and three energy systems involved in sporting performance). Finally, we look at how to improve our fitness by participating in a series of training methods and learning how to apply the training principles to our programs.

Active participation in class both in the theory and practical lessons is essential. Other assessment includes topic tests, laboratory tasks and a semester examination.

#### YEAR 10 ELECTIVE: Health (Elective / One semester)

This subject provides students with an understanding of the knowledge, skills and behaviours that promote physical, mental, emotional, social and spiritual health and wellbeing.

Topics: The Dimensions of Health and Wellbeing, Respectful Relationships, Health Promotion programs to improve Australians Health and Wellbeing, Food and Nutrition, Alcohol and other Drug education and awareness, Mental Health conditions; prevention, intervention and postintervention strategies.

Assessments types include a Podcast, Investigative Research Task, Topic Tests and a Semester Examination.

#### YEAR 10 ELECTIVE: Outdoor and Environmental Studies (Elective / Units 1 & 2 / full year)

See the Senior Pathways Information book for more information on this subject.

# LANGUAGES

At Loreto College, we emphasize both linguistic competence and cultural studies through our language curriculum. Continuing language studies into Year 10 as an elective, Loreto promotes language learning as a core part of education. Learning a language improves communication, cultural understanding, and problem-solving skills. Proficiency in a foreign language opens doors to diverse career and educational opportunities globally, enhancing cognitive functions and decision-making abilities valued in today's job market. Language education at Loreto College prepares students for success in the modern world.

Students will develop a broader grammatical base in order to prepare for VCE. To enjoy this subject, students only need to have a positive "have a go" attitude.

#### YEAR 10 ELECTIVE: Japanese (Elective / full year)

The Japanese course enhances your Japanese proficiency across listening, speaking, reading, and writing, while introducing diverse facets of Japanese culture, including travel, shopping, homestays, technology, and customs. It encourages exploring diverse perspectives to understand cultural diversity and contrasts with your own background, ultimately deepening your grasp of Japanese language and culture for a richer learning experience.

Incursions/ Excursions: Sovereign Hill, Ballarat Tech School, Japanese restaurant, local primary schools, Speech Contest at Ballarat Town Hall

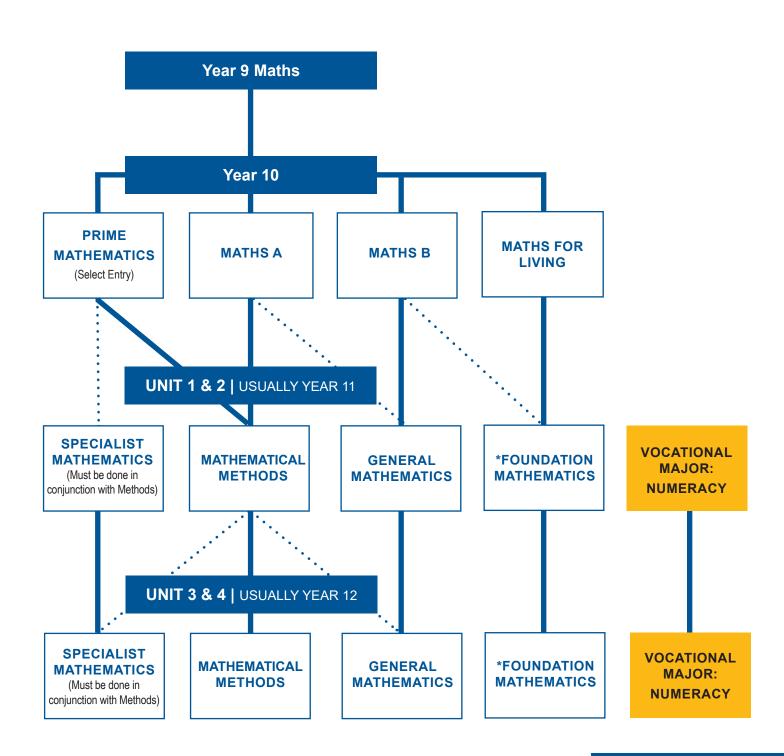
Assessment types: Role-play, essays, Unit Tests, research projects, Semester Exam

#### YEAR 10 ELECTIVE: French (Elective / full year)

The course aims to boost your French proficiency in listening, speaking, reading, and writing, while also delving into French culture, covering history, geography, customs, and music. It promotes exploration of diverse perspectives to heighten awareness of cultural diversity and offers a contrast with your own background. Ultimately, it deepens understanding of French language and culture, enhancing your overall learning.

Assessment types: Role-play, essays, Unit Tests, research projects, Semester Exam

# **Mathematics Pathways**



Students from Maths A or Prime may apply to complete General Maths Units 3 and 4 in Year 11  $\,$ 

All Year 10 Maths subjects may serve as a pre-requisite for the Vocation Major in Numeracy. In this subject there is an emphasis on vocational and applied learning in relation to Mathematics and is part of the VCE Vocational Major Pathway.

\* This subject is still under review and may not be offered at Loreto College.

NOTE: Solid Arrows indicate the most common pathways and the dotted arrows show possible alternatives.

## **MATHEMATICS** (CHOICE OF CORE)

#### YEAR 10 CORE: Mathematics A (Approved selection / full year)

In Mathematics A students study a range of functions, including linear, quadratic, cubic, hyperbola, truncus, square root, exponential, logarithmic and circular. The algebra required to deal with these functions is explored and applications in modelling real life situations are considered. Students will also analyse situations involving chance and use trigonometry to solve problems involving angles.

Topics from Year 9 that are similar to the sort of material covered in Maths A are Linear Equations and Inequations, Linear Relations, Quadratic Functions, Indices and Surds, Pythagoras, Trigonometry and Probability.

Mathematics A is design to prepared students for Mathematical Methods in Year 11, although it is also possible to continue on to General Mathematics in Year 11.

#### YEAR 10 CORE: Mathematics B (Approved selection / full year)

In Mathematics B there is a strong emphasis on statistics and analysing data, both univariate and bivariate. Students will use sequences and recursion to explore patterns and apply these to a range of financial situations, including percentage increase and decrease and simple and compound interest. Students will also work with matrices and networks to describe real life situations. Basic linear algebra, equation solving and graphing skills are consolidated and students also refine measurement skills, finding perimeter, area and volume of a range of shapes.

Topics from Year 9 that are similar to the sort of material covered in Mathematics B are Statistics, Linear Equations, Linear Relations, Measurement and Financial Maths. Mathematics B is designed to prepare students for General Mathematics in Year 11, which then leads onto General Mathematics in Year 12.

#### YEAR 10 CORE: Maths For Living (Approved selection / full year)

Note: This subject is dependent on having sufficient numbers to run.

In Maths For Living there is a strong emphasis on the use of mathematics in practical contexts encountered in everyday life in the community, at work and at study.

Students will use shapes and measurement to produce scale diagrams and plans and interpret maps. They will also explore number patterns, estimate answers and evaluate the reasonableness of an answer. Analysis and interpretation of data will be carried out using real data and students will also analyse the use of data in the media.

Other life skills that will be developed are reading timetables, problems involving moving between time zones, reading scales, evaluating probabilities in situations involving chance as well as basic number skills both with and without the use of technology.

Assessment in this subject is largely project-based.

Maths For Living is recommended for students who need a grounding in mathematical skills for everyday life. This subject is not suitable for students considering studying VCE Mathematics but would provide sufficient background for VCE VM Numeracy.

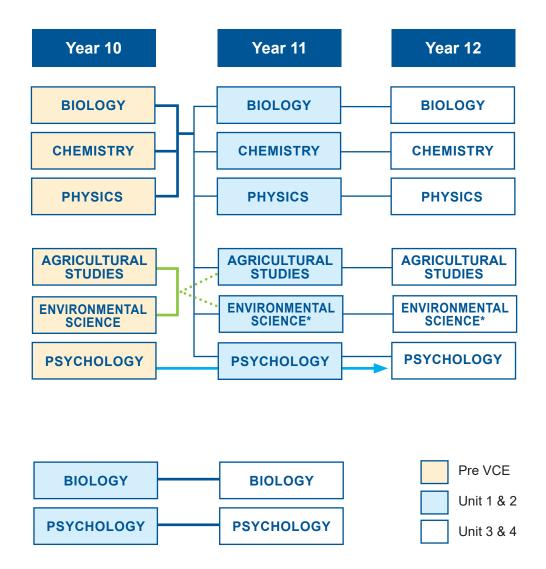
#### YEAR 10 CORE: Prime Mathematics (Select entry / full year)

In Prime Mathematics students will explore the same material as in Mathematics A but to a higher level of complexity. Natural extensions of the Mathematics A material will be explored. It is designed to challenge and extend students and therefore entry to this class will be by invitation, based on Year 9 Mathematics results and a demonstration of strong study skills. Students will have the opportunity to explore functions in depth and use them to model real life situations and to see the many connections between mathematics and the natural world.

Topics from Year 9 that are similar to the sort of material covered in Prime Mathematics are Linear Equations and Inequations, Linear Relations, Quadratic Functions, Indices and Surds, Trigonometry and Probability.

Prime Mathematics is designed to give students a firm foundation from which to take their mathematical studies further into Mathematical Methods and perhaps Specialist Mathematics in Year 11. Students studying Prime Mathematics may also choose to study General Mathematics Units 3 and 4 in Year 11.

# **Science Pathways**



In year 10, each option is one semester long. You must choose at least one for the year but up to 4 can be completed in the year.

**Biology, Chemistry and Physics** studies in year 10 allows students to access all of the Unit 1 & 2 Sciences.

Year 10 students may have the option to complete Units 1 & 2 in Biology or Psychology.

Agricultural Studies or Environmental Science\* in year 10 allows students to follow on with either subject in Year 11.

Psychology in year 10 allows you to follow on with Psychology in Year 11.

Each course will depend upon numbers.

\* Environmental Science will be offered to Year 10 students only in 2024, with options to continue into VCE if numbers are sufficient to run the program.

### **SCIENCE** (MUST CHOOSE AT LEAST 1 SCIENCE SUBJECT)

#### YEAR 10 ELECTIVE: Agricultural And Horticultural Studies (Elective / One semester)

In this unit the students will study the role of plants and animals in agricultural and/or horticultural businesses in Australia, identification of types/varieties, structure and function of plants, and their growth. They will also investigate the identification of breeds and structure of animals and their growth, as well as types and compositions of soil and other growing media. Students will work to gain an understanding of various farming enterprises by visiting agricultural, aquacultural and horticultural facilities. Students will gain an understanding of animal husbandry whilst caring for calves and chickens onsite. This unit provides the best preparation for the continued study of Agricultural and Horticultural Studies or Environmental Science at VCE level.

Assessment types: Semester exam, Independent research task.

#### YEAR 10 ELECTIVE: Pre-VCE Biology (Elective / One semester)

Students will perform a series of practical activities to expand their knowledge of cell structure and function including organelles and the processes of photosynthesis and respiration. Students will look at transplantation of organs through the context of the circulatory system. Students will also study the nature of disease and the role of the human immune system in defending us against pathogens, including the use of vaccination. Key ideas in evolution will be explored including natural selection, speciation and the current thinking on human evolution. There will also be a unit that integrates concepts of Chemistry and the role it can play in the study of Biology. This unit provides the best preparation for the continued study of Biology at VCE level.

Assessment types: Topic tests, Semester exam.

#### YEAR 10 ELECTIVE: Pre-VCE Chemistry (Elective / One semester)

Students will study the development of the periodic table including practical activities to explain the reactivity and placement of elements on the periodic table. The bonding between atoms will be investigated including lonic, Covalent and Metallic bonding. Practical activities on acids and bases and varying pH will be carried out and an introduction to the Mole Concept and Stoichiometry will be covered. An individual Investigation task is conducted which involves designing and performing a Practical task. There will also be a unit that integrates concepts of Biology and the role it can play in the study of Chemistry. This unit provides the best preparation for the continued study of Chemistry at VCE level.

Assessment types: Semester exam, Scientific poster, Independent research task, topic tests.

#### YEAR 10 ELECTIVE: Environmental Science (Elective / One semester)

Environmental science is an interdisciplinary, investigative science that explores the interactions and interconnectedness between humans and their environments, and analyses the functions of both living and non-living elements that sustain Earth systems. Students could investigate the extent to which humans modify their environments and the consequences of these changes in local and global contexts. Areas of focus include biodiversity, pollution, food and water security, climate change and energy use. Students examine the challenges and opportunities presented by selected environmental issues and case studies, and consider how different value systems, priorities, knowledge and regulatory frameworks affect environmental decision-making and planning for a sustainable future. This unit provides the best preparation for the continued study of Environmental Science or Agricultural and Horticultural Studies at VCE level.

Assessment types: Semester exam, Scientific poster, Independent research task, topic tests.

#### YEAR 10 ELECTIVE: Pre-VCE Physics (Elective / One semester)

Students will study the way heat moves and effects objects through the study of thermodynamics. Practical activities investigating and designing electrical circuits will be carried out to develop an understanding of electricity. The use of forces to influence the motion of objects will be carried out to develop an understanding of Newton's Laws of motion. Students will look at our place in the universe when they study cosmology. There will also be a unit that integrates concepts of Chemistry and the role it can play in the study of Physics. This unit provides the best preparation for the continued study of Physics at VCE level.

Assessment types: Semester exam, Scientific poster, Independent research task, topic tests

#### YEAR 10 ELECTIVE: Psychology (Elective / One semester)

Year 10 Pre-VCE Psychology would aim to introduce key psychological concepts and skills to students considering undertaking VCE Psychology. This course would introduce: the functions of the nervous system, research methods, dreaming, forensics and personality. The course would integrate key science skills and student-based investigation and seek to enhance independent thinking. There will also be a unit that integrates concepts of Biology and Chemistry and the role they play in the study of Psychology. This unit provides the best preparation for the continued study of Psychology at VCE level.

Assessment types: Assessment types: Semester exam, Media response, Scientific poster, Independent research task, topic tests.

# TECHNOLOGY

#### YEAR 10 ELECTIVE: Food Studies (Elective / One semester)

Year 10 Food Studies aims to provide students who have an interest in ingredients, preparation, production and presentation techniques, with an opportunity to become more skillful and expand on their food literacy. This unit focuses on current food trends with the aim of challenging students to evaluate the various influences on their eating patterns. Students will be equipped with the necessary skills and knowledge to prepare quick and nutritious foods whilst expanding their cooking experiences using traditional and modern methods of food preparation. They will continue to broaden their understanding of the components of the design process and actively use this process to investigate, generate, plan and manage, produce and evaluate products in response to design brief specifications.

Assessment: Design Brief tasks and Semester Exam.

#### YEAR 10 ELECTIVE: Design and Technologies, Materials (Elective / One semester)

This subject is offered as a preparatory subject for VCE Product Design and Technologies.

This elective dives into modern design thinking and practice, and the tension between consumerism and sustainability as a highly impactful part of our social, economic, and personal lives. We will look at the bigger picture of design and construction, including conservation, systems of consumption, and sustainability in fashion and the theories behind it.

Students will create a folio, and a garment that can adapt to evolving style trends and end-user needs. Students will build upon their skills in illustration, sewing and the use of varied technologies; fundamental skills which facilitate core sustainable practices including repurposing, refashioning, and renewing.

This elective introduces emerging technologies of use in the design process; 3D printing, laser cutting, prototyping, as well as focusing on fashion design and practical construction.

Assessments: Folio and product, Exam

#### YEAR 10 ELECTIVE: Multimedia (Elective / One semester)

In Multimedia, students explore a range of digital production methods, develop production skills and create productions that reflect an understanding of audiences. They focus on animation, image manipulation techniques, green screen effects, sound engineering and coding. Students are asked to work both independently and collaboratively, and work to production deadlines.

# **FUTURE SKILLS**

#### YEAR 10 ELECTIVE: FUTURE SKILLS (Elective / One semester)

In Future Skills the focus is on the development of skills that would be valuable to both a vocational and academic future pathway. Students will develop skills for work and life in Time Management, Personal Organisation, Literacy and Communication. Students complete practical and portfolio work through hands on activities, experiential learning and a project based approach to learning. Students will be involved in projects that include working with others in the community and topics developed based on students areas of strength and interests.

Assessments: Portfolio work and presentation