Our Lady of Sion College

Year 10, 2027 Curriculum Handbook

Contents

Principal's Message

Learning at Our Lady of Sion College is grounded in our motto, Truth in Love. It challenges you to seek understanding with compassion, pursue excellence with humility, and treat others with generosity and respect. It shapes not only what you learn, but who you are becoming.

Our Year 10 curriculum is designed so that you feel known, valued and confident in your learning. It fosters curiosity, independence and growth, helping you develop the skills and confidence to lead, aspire and thrive.

Our vision is to sow the seeds of hope, discover and grow the gifts within you, and inspire a commitment to justice. This comes to life through a learning program that values your voice, supports your wellbeing, and challenges you to grow.

This handbook outlines your Year 10 learning program for 2027. It will guide you through the subjects you will study and the opportunities ahead. As you move towards the senior years of schooling, you will experience greater independence and increased choice through a broad range of elective opportunities, helping you shape a program that reflects your interests, strengths and future aspirations.

I encourage you to read this handbook carefully with your parents or carers, as it contains important information about the subjects you will study. You will see that it provides a broad range of subjects whilst covering the Victorian Curriculum.

I wish you all the best in your studies for 2027.

Rebecca Cetrola

College Principal

Year 10 Curriculum Structure

The curriculum at Our Lady of Sion College provides a Catholic education imbued with the Sionian charism. The Year 10 curriculum focuses on the development of important skills including literacy, numeracy, interpersonal and interdisciplinary skills as well as the development of key knowledge and skills from within the various disciplines. The curriculum offers a significant number of units and is structured to offer students a high degree of flexibility to allow for personal talents and gifts to develop. Year 10 provides students with the opportunity to develop skills and prepare effectively for the final two years of secondary schooling; VCE or VCE Vocational Major. Year 10 subjects are rigorous in content, have a variety of assessment items and have an end of semester examination.

Year 10 students learn within a rigorous, challenging, supportive and contemporary learning environment that promotes personal excellence. The Year 10 curriculum provides engaging learning programs that encourage students to use their talents to the best of their abilities and to strive for excellence. The learning program is personalised through the extensive selection of units offered, as well as through learning support and enrichment.

The Year 10 curriculum structure consists of core, elective and accelerated units. Students may choose to apply to study a VCE Unit 1 and 2. The application process is outlined on page 9. A unit runs for the length of a semester. Within core subject areas students may have the option of selecting from a range of units within the Learning Area. Descriptions of all units are provided later in the handbook.

To assist Year 10 students in considering post-school options and potential pathways, students will undertake work experience in the first week of Term 3. The week allows students to test out their ideas about what a suitable pathway might look like. It is a valuable week that allows students to develop new skills, career ideas and an understanding of the workplace. Year 10 students are asked to secure a placement by the beginning of Term 2. Further information can be found at www.olsccareers.com or by speaking to the Careers and Pathways Counsellor.

Core Units

Year 10 students are required to study the following units across the year:

- Religious Education
- English
- Mathematics (Pre-General or Pre-Methods; see p. 7 for Mathematics Pathway Overview)
- L'Chaim
- Health and Physical Education core (one semester, a maximum of two subsequent electives may also be chosen; see p. 8 for Physical Education Pathway Overview)
- Science core (one semester chosen from three options; a maximum of two subsequent electives may also be chosen; see p. 7 for Science Pathway Overview)
- Humanities elective (one semester chosen from four options, a maximum of two subsequent electives may also be chosen)
- Pastoral.

Elective Units

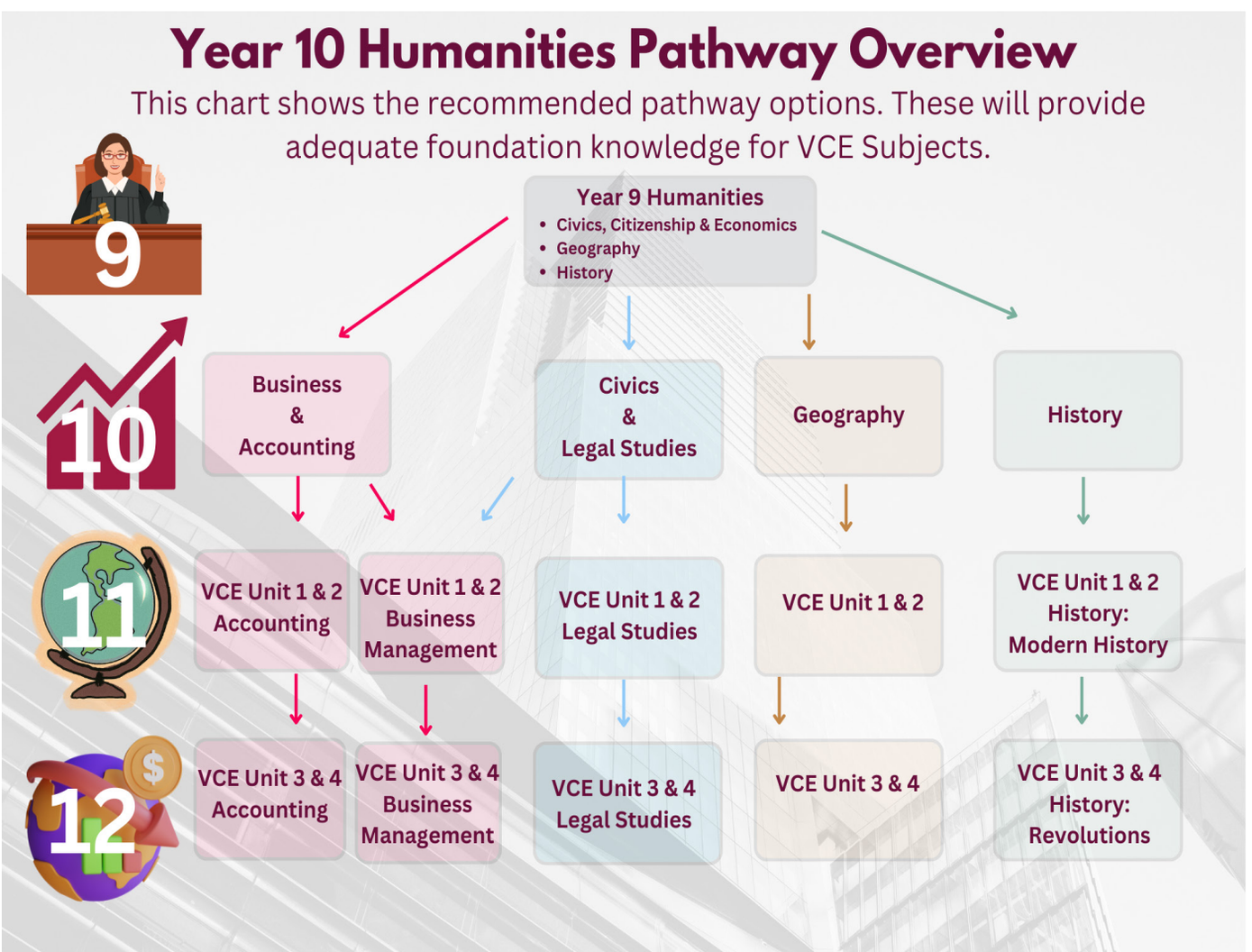
Students are then required to select **five elective units** from the table below:

- if students select a Language they must select it for two semesters
- if students are approved for acceleration, this is considered an elective and they must select the subject for two semesters.

A	**Arts** *Select a **maximum** of three:*	• Creative Practice • Drama • Media	• Music Performance • Visual Communication Design
B	**English**	• Literature	
C	**Health and Physical Education** *Select a **maximum** of two:*	• Health and PE: The Amazing Body • Health and PE: Let's Get Physical • Health and PE: Peak Performance	
D	**Humanities** *Select **one** as Humanities Core subject and **maximum** of three in total:*	• Business and Accounting • Civics and Legal Studies	• Geography • History
E	**Languages** *Must be studied for the **full year** and counts as **two** electives:*	• Chinese • Italian • French	
F	**Science** *Select **one** as compulsory Science Core subject:*	• Pre-Biology • Pre-Chemistry	• Pre-Physics • Sceptics and Conspiracies
	Science *Select a **maximum** of two as electives:*	• Pre-Biology • Pre-Chemistry	• Pre-Physics • Mind Matters • Environmental Sustainability & STEM
G	**Technologies** *Select a **maximum** of three:*	Design and Technologies: • Food Studies - Food By Design • Food Studies - Food Styling • Textiles	Design Technologies: • Digital Technologies - Cyber Forensics

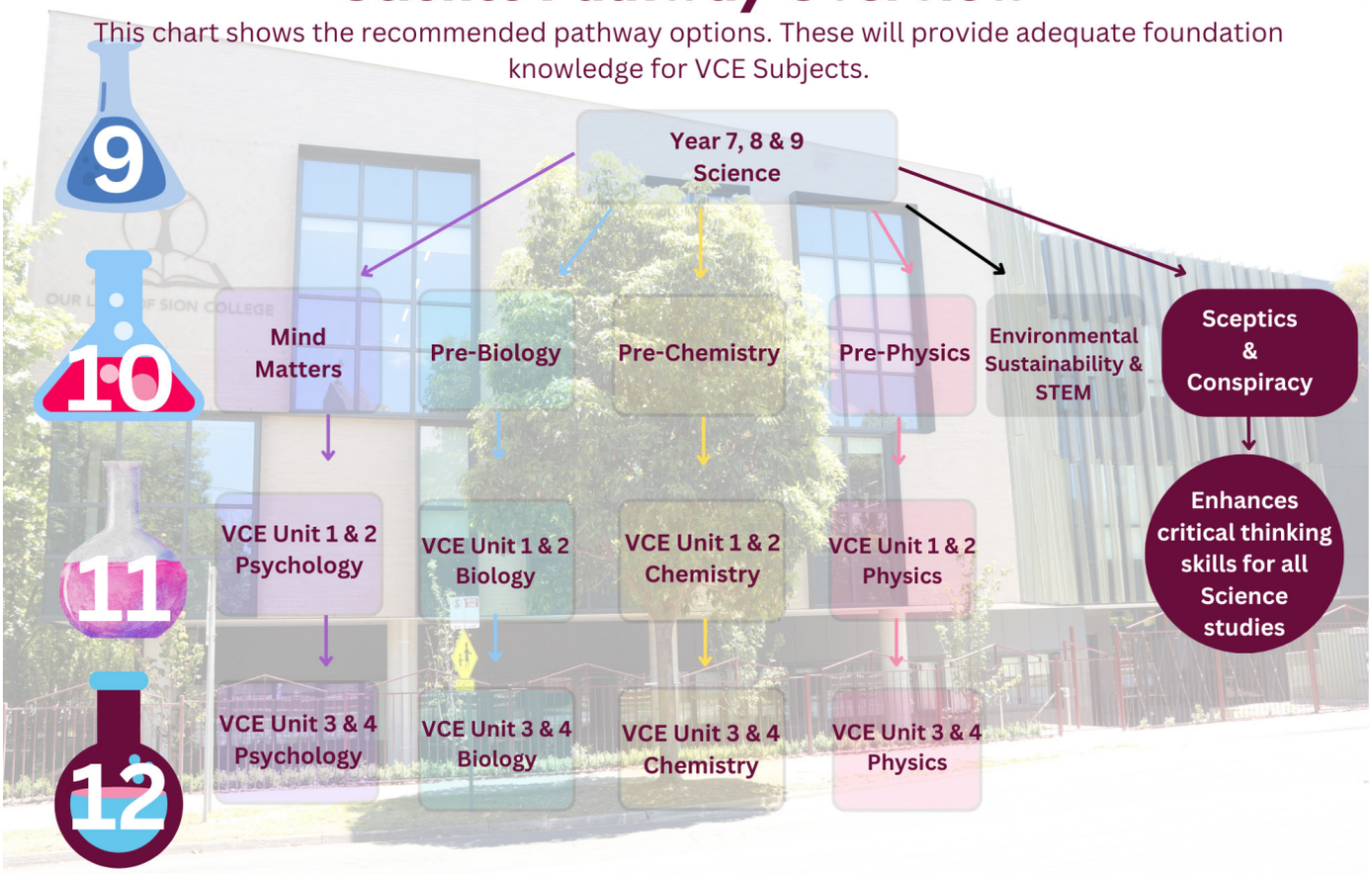
Year 10 Subject Year Overview Planner

CORE				ELECTIVE		
English	Religious Education	Select Maths	Health and Physical Education Core	Science Elective	Elective	Elective
CORE			**ELECTIVE**			
English	Religious Education	Select Maths	Humanities Elective	Elective	Elective	Elective

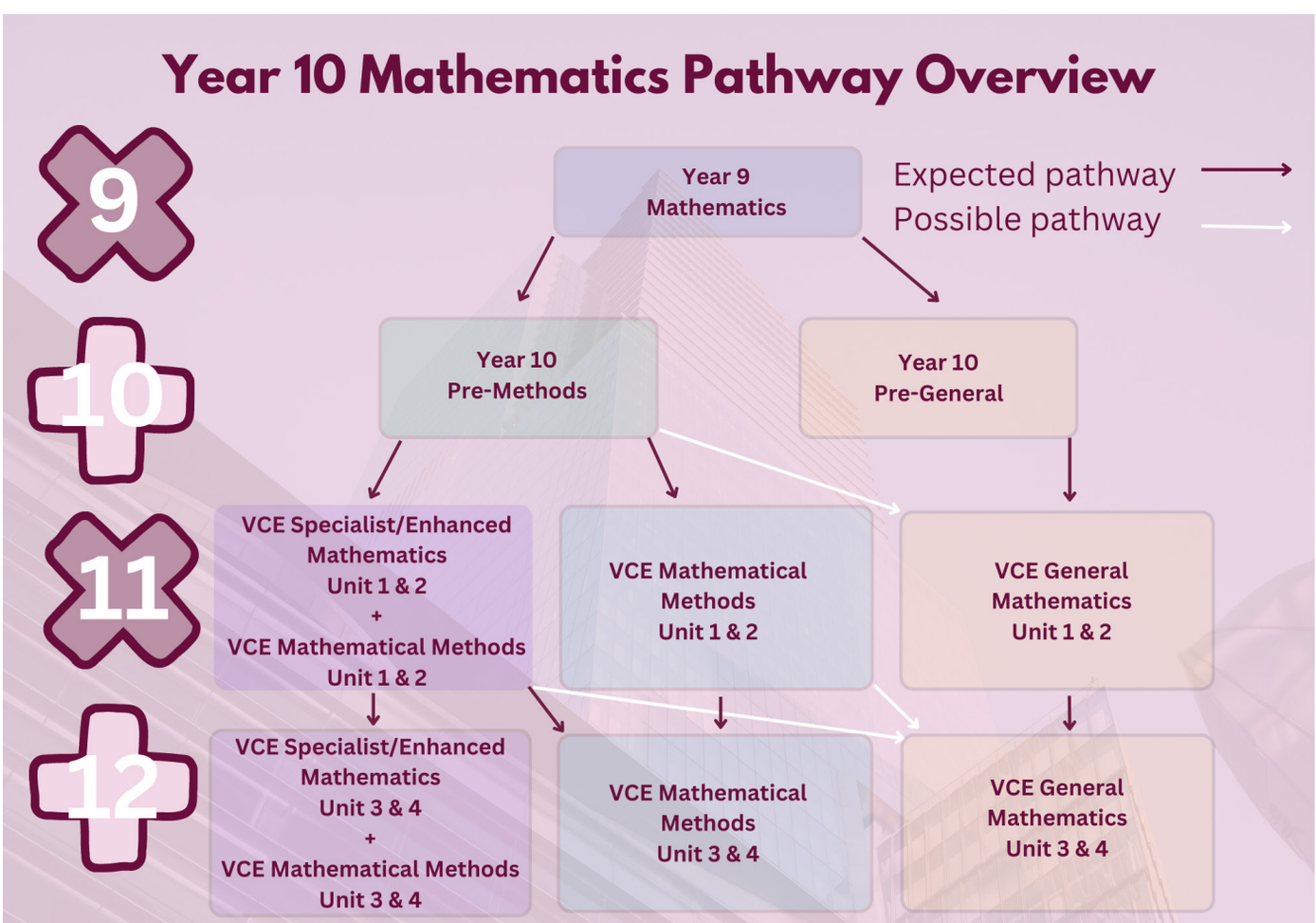


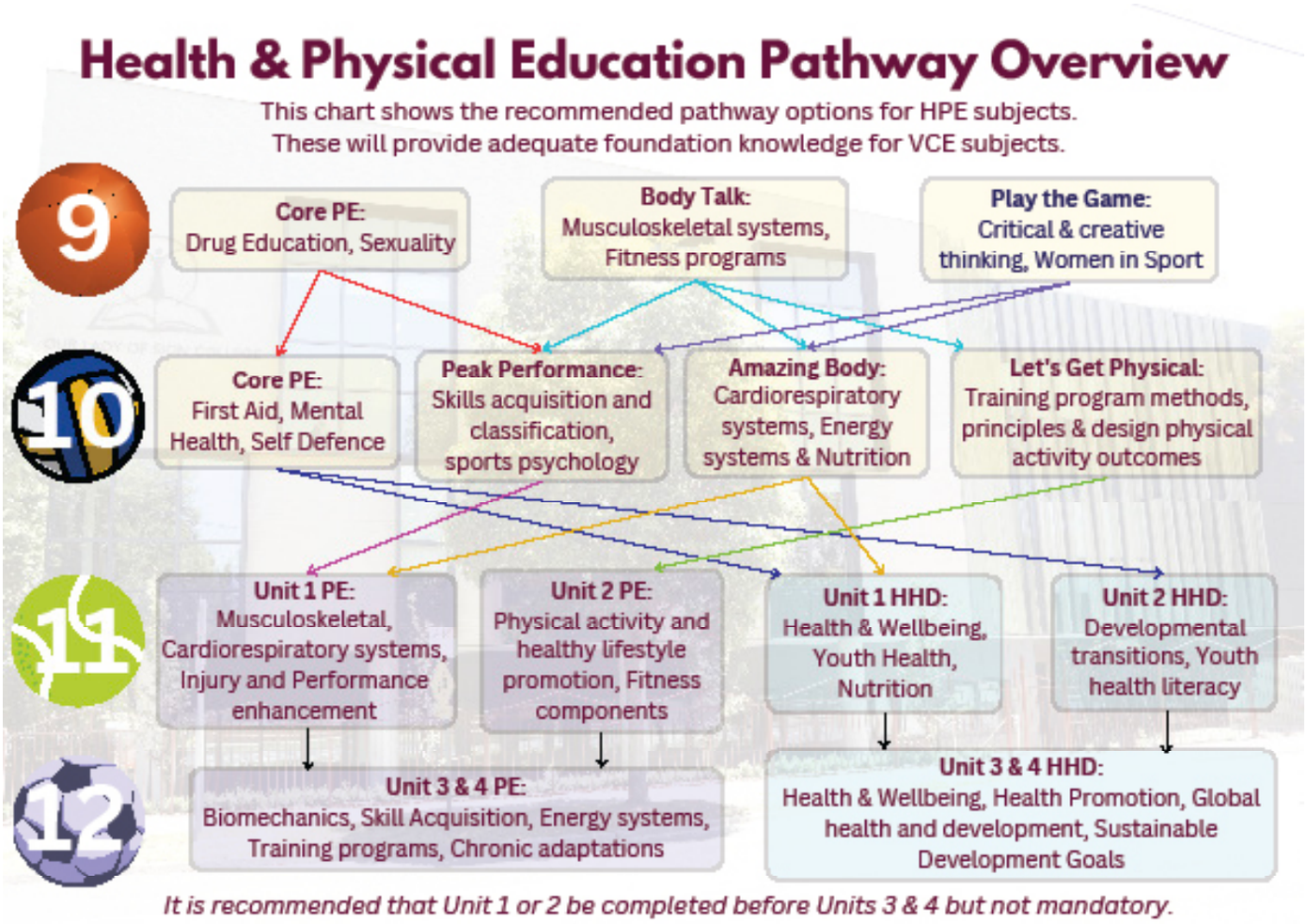
Science Pathway Overview

This chart shows the recommended pathway options. These will provide adequate foundation knowledge for VCE Subjects.



Year 10 Mathematics Pathway Overview





Subject Selection Process

There are many factors to consider when you are selecting preferences for Year 10 subjects. After reading this curriculum handbook you might consider discussing the choices with the relevant Learning Leaders and subject teachers as well as current Year 10 students who are studying similar electives in which you are interested.

Key Dates

Please remember to select preferences for subjects based on your interests and abilities. Key dates relevant to the 2027 subject selection process include:

17 June	2027 Curriculum Handbooks available online
23 June	Year 10, 2027, Subject Selection Information Evening
24 June	Year 10, 2027, Subject Selection Seminar (students only)
13 July	Applications to undertake a Unit 1 and 2 in Year 10 due
4 Aug	Web preferences open at 4.00 pm
10 Aug	Web preferences close at 8.00 am
10 Aug	Web preference signed receipts due to Homeroom teachers

Undertaking a Unit 1 and 2 in Year 10

Students in Year 10 have the opportunity to access some VCE 1 & 2 Units. This allows students who are ready to meet the academic challenges and rigours of VCE to have the opportunity to broaden their VCE program. Students who wish to be considered for such units should access the *2026 VCE/VCE Vocational Major Curriculum Handbook* via the Learning and Teaching link on the College website. The College will offer the following Unit 1 and 2 VCE units in 2024 for acceleration. The VCE units that may be available are:

- Accounting
- Applied Computing
- Art Creative Practice
- Biology
- Business Management
- Chinese
- Drama
- Food Studies
- Health and Human Development
- History
- Legal Studies
- Media
- Music Performance
- Physical Education
- Psychology
- Studio Arts - Making and Exhibiting
- Visual Communication Design
- Texts & Traditions

Important notes:

Places in classes will be limited because students in Year 11 and 12 undertaking VCE must be given first priority.

Timetable restrictions mean that preferences may not be able to be accommodated.

Some Unit 1 and 2 studies are not recommended at Year 10.

Further questions about VCE subjects should be directed to the relevant Learning Leader, the Senior Learning Leader, or the Deputy Principal – Learning and Teaching.

When applying to undertake a VCE study, students are asked to nominate three subjects that they would like to study.

Why undertake a Unit 1 and 2?

It is important that students consider why they are applying to undertake a Unit 1 and 2.

Acceleration at this level provides some students with challenge and enrichment in a subject that may be of interest; some students benefit from familiarising themselves with VCE at Year 10 and for some students it may be a study that they may be eligible to undertake a Unit 3 and 4 in Year 11.

For students who then accelerate in Year 11 by undertaking a Unit 3 and 4, it provides a sixth study which contributes 10% toward their ATAR.

Note: Students need to re-apply in 2027 to undertake a Unit 3 and 4 in Year 11, 2028. Entry is not automatic and student success across all subjects will be taken into consideration.

How do I apply?

If you are eligible to apply to undertake a Unit 1 and 2 subject in place of two of the electives in Year 10 you must complete the application form for accelerated studies. The form is available in SEQTA Learn under the Forms & Info tile.

Is this pathway right for me?

This is a vital question that students are urged to explore in consultation with staff and their parents before submitting an application. When exploring this question, students must consider their total VCE program over three years, (i.e. Years 10–12) and how undertaking a Unit 1 and 2 at Year 10 impacts on Year 11 and Year 12.

For some students, undertaking a Unit 1 and 2 at Year 10 or a Unit 3 and 4 at Year 11 may not be the best option, as in the following cases:

- Some Unit 3 and 4 studies require a level of maturity that comes with time and students may achieve a higher study score if it were undertaken in Year 12. For example, it may be appropriate for a student seeking enrichment in Science to undertake Unit 1 and 2 Biology in Year 10 but not Unit 3 and 4 Biology in Year 11.
- A student who is undertaking a VET or Language outside of school with the intention of taking this to Unit 3 and 4 level is advised to take this into account when planning their VCE program at Our Lady of Sion College. All students are expected to undertake a full VCE program at Year 12, which entails five Unit 3 and 4 studies plus Religious Education. A sixth subject is no advantage to a student's ATAR.
- Students on a reduced load for any reason will not be able to accelerate, allowing them to focus on their core learning.
- Students are regularly reviewed to ensure that they are on the right pathway. Students may be contacted at the end of Semester 1 to ensure that they are experiencing learning success across all of their subjects.

Criteria for application to study a VCE subject in Year 10, 2027

You must submit a folio (display folder) with your application form and accompanying documentation and attend an interview with VCE Panel members as part of the application and selection process for studying a VCE subject whilst in Year 10. The folio would need to include a copy of your Year 9 Semester 1 report (can be downloaded from SEQTA) with evidence of the following:

- Evidence of academic aptitude as demonstrated by high academic ability, particularly in English (criteria sheets or work samples should be included) – evidence on your Semester 1 Report
- Evidence of self-challenge in the subject area and/or areas of school/community involvement as demonstrated by:
    - Results in subject and/or national competitions
    - Outside involvement in a related area (sporting, performance, work, Premiers' Reading Challenge etc.)
- Excellent organisational skills: no late or ungraded work grades for any subject and consistently high results in all subjects for approaches to learning – evidence on your Semester 1 Report
- Excellent attendance record: no more than six absences in Year 9 Semester 1 (subject to WAGL discretion) – evidence on your Semester 1 Report
- Letter of application
- Letter written and signed by parents indicating support for acceleration.

Applications must be completed either prior to or by the due date – no late applications will be accepted. Incomplete applications will not be considered.

Support available

The following staff are happy to answer questions that you may have about Year 9 subject selection:

Allison Stott astott@sion.catholic.edu.au	Deputy Principal – Learning and Teaching
Christine Kralj ckralj@sion.catholic.edu.au	Deputy Principal – Student Wellbeing
Anna Gionfriddo agionfriddo@sion.catholic.edu.au	Deputy Principal – Faith and Mission
Sarah Chalmers schalmers@sion.catholic.edu.au	Director Learning Diversity
Brooke O'Hara bohara@sion.catholic.edu.au	Careers and Pathways Counsellor
Amy Garnham agarnham@sion.catholic.edu.au	Religious Education Learning Leader
Natasha Borg nborg@sion.catholic.edu.au	Arts Learning Leader
Melissa Walsh mwalsh@sion.catholic.edu.au	English Learning Leader
Isabelle Rebecca irebecca@sion.catholic.edu.au	Health and Physical Education Learning Leader
Belinda Buchanan bbuchanan@sion.catholic.edu.au	Humanities Learning Leader
Gail Amato gamato@sion.catholic.edu.au	Languages Learning Leader
Paul Davis pdavis@sion.catholic.edu.au	Mathematics Learning Leader
Hannah Muller hmuller@sion.catholic.edu.au	Science Learning Leader
Anthony Barry abarry@sion.catholic.edu.au	Technologies Learning Leader
Adam Rieusset arieusset@sion.catholic.edu.au	Year 10 Wellbeing and Growth Leader

Correct at time of production

Wellbeing for Learning

Learning Program

The Year 10 Wellbeing for Learning Program is designed to support students across Semester One and Semester Two as they develop into confident, resilient, and responsible young adults. Grounded in a strong sense of belonging within the Sionian community, the program nurtures students to make positive choices and develop excellence within themselves.

In Semester One, students engage in experiences that promote leadership, service, personal growth, and independence. Opportunities such as Language Tours, Indigenous Immersion, Peer Support, Talk and Tour leadership, and portfolio and class leadership roles enable students to contribute meaningfully to College life while building confidence and maturity.

In Semester Two, the program builds on these foundations with a focus on Respectful Relationships and growth mindset. Students are supported to strengthen self-awareness, empathy, and personal responsibility while continuing to engage in leadership and service opportunities that develop their gifts and talents.

Across the year, the program fosters resilience, hope, and a positive mindset, empowering students to approach challenges with courage and optimism as they prepare for senior schooling and beyond.

Key Question

How can I develop the confidence, resilience, and personal responsibility to contribute positively to my community and flourish as a young adult?

Learning Outcomes

It is intended that students will:

- Develop self-awareness and emotional intelligence to support personal wellbeing and decision-making
- Demonstrate increasing maturity, independence, and responsibility in learning and relationships
- Build resilience and a growth mindset to approach challenges with confidence and optimism
- Strengthen respectful relationships through empathy, communication, and collaboration
- Participate in leadership, service, and community opportunities to contribute positively to College life.

Success Criteria

Students will be able to:

- Demonstrate respect, responsibility, and positive engagement within the Sionian community
- Apply resilience and a growth mindset when facing challenges and setbacks
- Show increasing independence in managing learning, goals, and personal wellbeing
- Build and maintain respectful relationships through empathy and effective communication
- Actively participate in leadership, service, and community opportunities, contributing to the life of the College.

List of Subjects

Religious Education

Arts:
Creative Practice
Drama
Media
Music Performance
Visual Communication Design

English:
English
Literature

Health and Physical Education:
Core Unit
The Amazing Body
Let's Get Physical
Peak Performance

Humanities:
Business and Accounting
Civics and Legal Studies
Geography
History

L'Chaim

Languages:
Chinese
French
Italian

Mathematics:
Pre-General Mathematics
Pre-Methods Mathematics

Science:
Pre-Biology
Pre-Chemistry
Environmental Sustainability & STEM
Pre-Physics
Mind Matters
Sceptics and Conspiracy

Technologies – Design and Technologies:
Food Studies – Food by Design
Food Studies – Food Styling
Textiles

Technologies – Digital Technologies:
Cyber Forensics

Wellbeing for Learning

Subject Outlines

Religious Education

Semester 1: Identity and Diversity, Humanity

Learning Program

Students will explore their personal beliefs, rituals, customs, and experiences, and reflect on how these elements contribute to shaping their identity. They will investigate and reflect upon, through the study of the Scriptures, the common elements of the three Abrahamic faiths – Judaism, Christianity and Islam – with particular focus on Abraham and Jerusalem. The students will explore the beliefs, rituals, experiences, ethics, texts and stories of each of the Abrahamic faiths to formulate an understanding of identity and diversity through these faith traditions. Students discuss changes to the Catholic Church's teaching about other faiths presented in *Nostra Aetate*. They will investigate the work of the Sisters of Our Lady of Sion in fostering positive Christian-Jewish relations and promoting inter-religious dialogue.

Students will study Catholic Social Teaching and the Church's understanding of mission. They will study the Catechism of the Catholic Church and its application to support moral decision-making. The students will reflect on the ongoing call for individuals to live a moral and just life.

Key Questions

- What characteristics, rituals, customs and beliefs form people in their faith?
- Who was Abraham?
- What characteristics, rituals, customs and beliefs form each of the three Abrahamic faiths?

Learning Outcomes

It is intended that students will:

- Explain the strengths and challenges of religious diversity in Australian culture
- Interpret Christian spirituality, identifying its particularity
- Understand the connections between the Abrahamic faiths and their shared histories, as well as points of difference
- Explore the Catechism of the Catholic Church to gain a better understanding of Church teachings
- Reflect on biblical teachings about right relationship with God and each other
- Explain the complexities involved in developing moral maturity and responsibility
- Reflect on their response to ethical dilemmas facing the local and global community.

Assessment Tasks

- Research and reflection tasks
- Essay
- Semester exam

Religious Education

Semester 2: The Kingdom of God

Learning Program

Students will reflect upon the nature of humanity and what it means to be *made in the image of God*. They will consider the rights and responsibilities that it should embrace to be able to live in a world where all people feel a sense of dignity and respect. Students will investigate the terrible plight of the Jews, not only during the Shoah (1933–1945) but in the centuries before, to establish that the Shoah was not an isolated incident, placing it within the context of a history of persecution suffered by Jews. Students will propose plausible explanations as to why this event was allowed to happen and explore how the Shoah was instrumental in providing impetus for the creation of Israel in 1948. Students will investigate the role of the Sisters of Our Lady of Sion in promoting Christian Jewish reconciliation post-Shoah, and reflect on ensuring that such events cannot happen again.

Students will focus on the meaning of the Kingdom of God through the study of the Scriptures and Catholic Church teachings. They will study the origins and developments of the Gospels, focusing on the Gospel of Mark. They will read, discuss and analyse the Gospel of Mark, noting its key features and impact on readers today. The structure, themes, literary forms and the cultural context will be studied.

Key Questions

- Why is it important to respect the dignity of all human beings?
- What does the Shoah teach us about humanity in the past and into the future?
- What do the Gospels teach us about the Kingdom of God?
- How can one build the Kingdom of God today?

Learning Outcomes

It is intended that students will:

- Investigate the anti-Semitic attitudes and treatment of Jews over the centuries
- Explore the Shoah as a historical event including its impact today
- Understand the impact of the 'bystander effect' on the victims of the Shoah
- Further explore the charism of the Sisters of Our Lady of Sion through the significance of interfaith dialogue
- Reflect on their role in upholding the dignity of all people in a multi-faith, multicultural society
- Develop an understanding of the key messages about the Kingdom of God found in the Gospel of Mark in the context for the original audience and for people of today
- Develop skills in exegetical method
- Explain Catholic Social Teaching and how it relates to or challenges the values demonstrated in Australian culture, society and politics.

Assessment Tasks

- Research and reflection task
- Exegesis
- Semester exam

Arts

Creative Practice

Learning Program

Students will undertake a range of structured media explorations across different practical areas, which may include drawing, painting, printmaking or sculpture. They will explore a variety of subject matter including still life, landscape, portraiture and self-expression. They will respond to inspiration and artworks of artists who work with similar ideas, imagery, materials or techniques. A visual diary will be maintained with visual and annotated records of processes used in the development of their own artworks. This process of evaluation and refinement will be integral to the development of technical competence and aesthetic awareness.

Students will discuss and analyse how the selection, combination and manipulation of art elements, principles, skills, techniques, media, materials and technologies construct meaning in selected artworks. The students' interpretation of artworks from a range of historical and cultural contexts will be evaluated and explored.

Key Questions

- How can we respond creatively to stimuli from our environment and experiences?
- How have other artists responded to their environment and experiences?

Learning Outcomes

It is intended that students will:

- Work within and across areas of painting, printmaking, drawing, applying decision-making skills to find the most effective way to implement ideas, design, create and make artworks devised from a range of stimuli (creating and making, and creativity)
- Evaluate, reflect on, refine and justify their work's content, design, development and their aesthetic choices (creating and making, reflection, evaluation and metacognition)
- Observe, research and critically discuss a range of contemporary, traditional, stylistic, historical and cultural examples of artworks in a range of disciplines and forms (exploring and responding)
- Analyse, interpret, compare and evaluate the stylistic, technical, expressive and aesthetic features of artworks created by a range of artists using appropriate art terminology (exploring and responding, reflection, evaluation and metacognition).

Assessment Tasks

- Practical folio
- Exploration of subject matter
- Major artwork exploring ideas and meanings
- Visual analysis
- Semester exam

Arts

Drama

Learning Program

The unit focuses on play-making techniques, production areas, improvisation and self-devised performance work. Students develop characterisation skills, building on voice and movement in the devised monologue performance as well as using the play-making process to create their devised work. The unit will culminate in a non-naturalistic devised group performance, presented to an invited audience. Students will work effectively within an ensemble and solo environment to combine the elements of drama in order to create a meaningful piece of theatre. They will view professional theatre and analyse this performance using appropriate dramatic terminology and analysis skills. This course requires creativity, analysis and collaboration.

Key Questions

- How do theatre styles influence the creative direction of a performance?
- How can play-making techniques, such as improvisation, enhance the realisation of characters?
- How can theatrical conventions and dramatic elements be manipulated to enhance the non-naturalistic style of performance work(s)?

Learning Outcomes

It is intended that students will:

- Create and make artworks devised from a range of stimuli (creating and making, exploring and responding, creativity)
- Maintain a record of how ideas develop in the creating, making and presenting of their performance works (reflection, evaluation, metacognition, exploring and responding)
- Experiment with innovative possibilities within the parameters of a task (creativity, creating and making)
- Select and use thinking processes and tools appropriate to particular tasks (reflection, evaluation and metacognition).

Assessment Tasks

- Monologue performance
- Ensemble performance
- Performance analysis of self-devised work/s
- Semester exam – Performance analysis of a professional performance

Arts

Media

Learning Program

In this unit, students will focus on the media production process, creating an action trailer and promotional poster. Students are introduced to codes and conventions associated with the genre and will create representations that manipulate media elements. They will examine and produce a production design plan, including concept development, written planning documentation, and visual planning documentation. The students will develop practical skills through the use and implementation of technical equipment, incorporating software such as Adobe Premiere Pro and Adobe Illustrator/ In Design, as well as hardware which will include the use of cameras, stabilisers and props.

Key Questions

- What is Media?
- What are codes and conventions, how can these be implemented by media producers?
- What are conventions of a trailer and a promotional poster, how can we reproduce these?
- What is a production design plan, how can we go about creating our own?
- What processes should we undertake throughout the development, pre-production, production, and post-production stages of creating a production?

Learning Outcomes

It is intended that students will develop:

- Conceptual and perceptual ideas and representations through design and inquiry processes
- An understanding of the use of techniques, materials, processes, and technologies
- Critical and creative-thinking skills, Media Arts languages, knowledge of Media Arts theories and practices
- A respect for and acknowledgment of the diverse roles, innovations, traditions, histories, and cultures of artists, designers, commentators and critics
- An understanding of Media Arts social, cultural and industry practices
- Confidence, curiosity, imagination, enjoyment, and personal aesthetic.

Assessment Tasks

- Scene There, Done That! (formative)
  - Introductory Practical Group Task
- Lights Camera Action Assessments (summative)
  - AT1: Production Design Plan
  - AT2: Trailer - using Adobe Premiere Pro (film)
  - AT3: Promotional Poster - using Adobe InDesign/Illustrator (print)
  - AT4: Semester Exam

Arts

Music Performance

Learning Program

In this subject, students will be given opportunities to develop their music performance, listening and appreciation skills. Students will present performances both as soloists and in group settings. Students will also continue developing music theory, aural and analysis skills and apply these skills through the creative outlet of arranging and performing. This unit will develop students' musical literacy, technical awareness and critically responding to music excerpts and is an introduction to the VCE Music Performance course. Students who undertake this study should have specialised instrumental tuition (either on-site or externally).

Key Questions

- How do different composers express a particular music style through their arrangements?
- How do music styles influence performances of a piece of music and audience interpretation?
- How do I interpret and employ different musical styles and elements to create my own piece of music?

Learning Outcomes

It is intended that students will:

- Explore and apply the key structural features of musical works; for example, the characteristic use of specific compositional devices, in realising plans for their own music works (exploring and responding, and creating and making)
- Students will explore and evaluate music written by composers, identifying the influences on their music through discussion, using appropriate language that compares the use of specific elements and compositional devices (exploring and responding)
- Students will work to develop their own personal style in performance, developing ways to successfully communicate expressive elements of music (creating and making)
- Students will apply their knowledge and understanding of particular musical styles to combine and manipulate elements to create their own music (creating and making).

Assessment Tasks

- Performances in solo and group settings, weekly performance seminar and end-of-semester major recital
- Preparing for performance (instrumental or vocal technique development)
- Music literacy and aural skill development
- Responding to and interpretation of music excerpts
- Semester exam

It is recommended that students undertaking Year 9 Music engage in individual or small group instrumental lessons.

Arts

Visual Communication Design

Learning Program

Students will engage with the VCD design process, generate imaginative ideas in response to set design briefs in the fields of practice; messages, environments and objects. Students will build their understanding of the design process and its application in both the work of other designers as well as themselves.

Students will engage with both manual and digital methods, including the use of Adobe Illustrator, to produce both two-dimensional and three-dimensional technical drawings. They will use divergent and convergent thinking strategies throughout the semester to enhance the effectiveness of visual communications for specified audiences.

Key Questions

- What role does design play in the world around you?
- How can we create visual representations of architectural designs?
- What technical drawings can designers use to present product designs?
- How do designers interact with style guides and what role do they play?
- What purposes, audience specifications and constraints need to be considered when responding to a brief?
- How do ideas change and develop as they journey through the design process?
- In what ways can we connect our research and analysis to practical bodies of work?

Learning Outcomes

It is intended that students will:

- Explore the nature of a design brief and how a hypothetical client and audience would shape a desired design for a product or event (exploring and responding)
- Apply their knowledge of design elements and principles both through annotation and practical exploration in their visual diaries, trialling media, methods and materials that best suit the brief (creating and making, and creativity)
- Practice skills and techniques through illustration, digital imaging, and technical drawing and other methods of graphic design styles, i.e., illustration, product design, architecture, digital design, pencil techniques (creating and making and creativity)
- Create a folio which will include self-assessment and reflection on the overall quality of ideas (reflection, evaluation and metacognition).

Assessment Tasks

- Technical drawing activities
- Production of graphic design presentations using Adobe Illustrator
- Production of three-dimensional product design presentations using TinkerCAD
- Production of architectural models and three-dimensional drawings
- Semester exam

English

Semester 1: English

Learning Program

Students interpret, create, evaluate, discuss and perform a wide range of literary texts designed to inform, entertain, critique, question and persuade. These include various types of media texts, including newspapers, film and digital texts, fiction, non-fiction, poetry, dramatic performances and multimodal texts, with themes and issues involving levels of abstraction, higher order reasoning and intertextual references.

Students explore language features and create a range of imaginative, informative and persuasive types of texts including narratives, performances, reports, discussions, literary analyses, transformations of texts and reviews.

Key Questions

- How do novelists create meaning?
- How do creative responses to texts deepen our understanding of themes, issues and ideas?
- How do social, historical and political contexts shape responses to ideas and issues?

Learning Outcomes

It is intended that students will:

- Read, view, analyse, critique, reflect on and discuss contemporary and classical imaginative texts that explore personal, social, cultural and political issues of significance to their own lives (reading)
- Write sustained and cohesive texts that experiment with different techniques
- Critically analyse the relationship between texts, contexts, speakers and listeners in a range of situations (speaking and listening).

Assessment Tasks

- Personal response to a text
- Creative responses of different forms exploring ideas, issues and themes
- Reflection on the writing choices made in the construction of texts and exploration of ideas
- Analytical response to text
- Semester exam

English

Semester 2: English

Learning Program

Students interact with peers, teachers, individuals, groups and community members in a range of face-to-face and online/virtual environments. They interpret, create, evaluate, discuss and perform a wide range of literary texts designed to inform, entertain, critique, question and persuade. These include various types of media texts, including newspapers, film and digital texts, fiction, non-fiction, poetry, dramatic performances and multimodal texts, with themes and issues involving levels of abstraction, higher order reasoning and intertextual references.

Students develop a critical understanding of contemporary media and the differences between media texts. They explore language features including successive complex sentences with embedded clauses, a high proportion of unfamiliar and technical vocabulary, figurative and rhetorical language, and dense information supported by various types of graphics presented in visual form. Students create a range of imaginative, informative and persuasive types of texts including narratives, procedures, performances, reports, discussions, literary analyses, transformations of texts and reviews.

Key Questions

- How do social and political contexts shape responses to ideas and issues?
- How does language work to manipulate readers?
- What makes a good argument?
- How does language capture and convey meaning about significant ideas?

Learning Outcomes

It is intended that students will:

- Read, view, analyse, critique, reflect on and discuss contemporary and classical imaginative texts that explore personal, social, cultural and political issues of significance to their own lives (reading)
- Write sustained and cohesive narratives that experiment with different techniques and show attention to chronology, characterisation, consistent point of view and development of a resolution (writing)
- Critically analyse the relationship between texts, contexts, speakers and listeners in a range of situations (speaking and listening).

Assessment Tasks

- Analytical response exploring issues, ideas and themes in a text
- Oral presentation of a point of view
- Analysis of argument and persuasive language on an issue in the media
- Semester exam

English

Literature

Students focus on reading a range of written texts and developing the skills that enable critical response to texts. Students will consider various interpretations of a given text and make judgments about the views and values that the author challenges or endorses. This subject is designed for students who are looking toward a closer reading of texts and those who wish to examine how texts reflect the social, political and historical context in which they were created.

Learning Program

Students will read a range of literary texts, including novels, plays and short stories, and respond critically to them. They will engage with the ideas in the texts, discuss them with the class, and write extended critical responses that examine these ideas. With an openness to close textual analysis, students will examine how language, form and style contribute to meaning. They will make judgments and draw conclusions on how social, political and historical contexts influence texts, and how an author endorses or challenges any number of viewpoints and values. Students will develop their academic writing, including style and vocabulary, to enable them to discuss the nuances and subtleties in a given literary work.

Learning Outcomes

It is intended that students will:

- Develop their close reading skills
- Examine how language contributes to meaning
- Develop their ability to draw conclusions on what viewpoints and values the author appears to challenge, endorse or leave unquestioned
- Compare their own interpretation of literary texts with academic and critical material
- Examine the social, political and historical context of texts
- Develop their ability to adopt academic language in their critical responses to literary texts.

Assessment Tasks

- Critical responses to texts
- Comparative analyses
- Analysis of the views and values underlying the texts
- Discussion based on close textual readings
- Semester exam

Health and Physical Education

Core Unit

Learning Program

Students will examine mental health issues relevant to young people and consider the stigma of mental illness, as well as the challenges for those with a mental illness. Students will explore first aid practices and the health needs of young people, including those related to women's health. They will learn how to access reliable information about health issues affecting them and to identify barriers and enablers to accessing health services. Students will be introduced to new and alternative sports, games or activities that require them to develop teamwork, learn new skills or adapt previously learnt skills in a new context.

Physical Education topics include self-defence and alternative sports. Health topics include mental health and first aid.

Key Questions

- Is a healthy state of mind an important part of my wellbeing?
- What strategies can I use when confronted with a tricky situation?
- What do I really need to know about my body?
- How can I defend myself in confronting circumstances?

Learning Outcomes

It is intended that students will:

- Demonstrate an understanding of appropriate first aid techniques and strategies
- Participate in sports, games, recreational and leisure activities that maintain regular participation in moderate to vigorous physical activity
- Identify and explain the rights and responsibilities associated with developing greater independence
- Describe mental health issues relevant to young people.

Assessment Tasks

- Mental Health task
- Alternate games
- First Aid task
- Self defence

Health and Physical Education

The Amazing Body

Learning Program

This unit exposes students to the required physiological and nutritional aspects of performance that allow athletes to achieve success in their chosen sport. The course looks at the factors that work together to ensure that all athletes not only train smart, but complement this with the required nutrition. Essential nutrients, hydration, timing of meals and correct eating plans are all explored and studied, along with the physiological components of training for an event such as, cardiorespiratory and energy systems. The practical component of this unit will include putting all theoretical aspects into practice. Students will participate in physical training for a targeted event and analyse every aspect of their performance, training, diet and nutrition along the way.

Key Questions

- How does an athlete prepare for an endurance event?
- How is energy produced and maintained during performance?
- Are you ready to run?

Learning Outcomes

It is intended that students will:

- Explore the concepts related to all aspects of performance from both a physiological and nutritional viewpoint
- Investigate, plan, implement, apply and evaluate a designed program for both the physical and practical applications of the unit.

Assessment Tasks

- Topic tests on key knowledge and skills
- Sports nutrition research task
- Practical application and physical skills – Running Program
- Semester exam

Health and Physical Education

Let's Get Physical

Learning Program

Students will develop the skills to be able to measure their own fitness levels and monitor improvement of certain fitness components. They will develop a weight-based training program and complete this program on a weekly basis throughout the course of the unit. At the conclusion of the unit students will evaluate the effectiveness of their program. In addition to this, students will participate in a range of activities designed to enhance their physical fitness and wellbeing. Some of the activities may include yoga, Zumba, meditation and pilates. At the completion of this unit students will have gained an understanding of how to assess their fitness, health and wellbeing.

Key Questions

- Am I meeting the Australian *24-hour Movement Guidelines?*
- Should women lift weights?
- How can I get the most out of my training program?
- What are the benefits of living an active lifestyle?

Learning Outcomes

It is intended that students will:

- Demonstrate proficiency in the execution of manipulative and movement skills during complex activities
- Demonstrate advanced skills in selected physical activities
- Use training methods to improve their fitness level, and participate in recreational and leisure activities that maintain regular participation in moderate to vigorous physical activity
- Identify strategies that promote mental health and wellbeing.

Assessment Tasks

- Physical activity and sedentary behaviour task
- Training program (strength and conditioning) and evaluation
- Strength and conditioning program evaluation
- Strength and conditioning practical application
- Semester exam

Health and Physical Education

Peak Performance

Learning Program

Students engage in theoretical and practical learning activities focused on the athlete and a range of factors that contribute to peak performance. The mechanisms involved in learning and improving skills are investigated in detail, including the classification of skills, the stages of learning and the major factors that affect skill learning. Students also examine performance enhancement, the impacts of psychology on performance and discuss ethical considerations in sport. Throughout the unit students participate in practical and laboratory activities designed to enhance understanding of and engagement in the theoretical components.

Key Questions

- How does an athlete learn and improve skills?
- What does it take for an athlete to get 'the edge'?
- What are the important ethical considerations for athletes and their coaches?

Learning Outcomes

It is intended that students will:

- Explore all concepts in relation to allowing themselves to achieve peak performance in their chosen field of sport
- Understand key concepts such as skill acquisition and psychological skills training
- Apply all knowledge learnt in theoretical aspects to ensure that physical performance is evaluated, reviewed and applied at the highest level.

Assessment Tasks

- Juggling written report (physical skills)
- Practical application, physical skills and teamwork
- Case studies (performance enhancing)
- Semester exam

Humanities

Business and Accounting

Learning Program

Accounting involves the collection and recording of financial data, the reporting of financial performance to stakeholders, the analysis of results and strategic decision making for individuals and businesses. This unit will give students the opportunity to develop the skills required to manage personal finances and enhance individual financial literacy. This unit will cover the establishment of a basic single entry accounting system to record financial information and produce financial reports.

The unit on Business will focus on what it means to be an entrepreneur. Students will investigate how business ideas are created and how conditions can be fostered for new business ideas to emerge. Students will research various entrepreneurs and consider their contribution to the business world. Students will look specifically at the motivation of entrepreneurs and their characteristics.

Students will also study marketing and how it influences their purchasing choices. They will develop an understanding that marketing encompasses a wide range of management practices, from identifying the needs of the target market and establishing a brand presence, through to considerations on price, product features and packaging, promotion and place. They will discover the world of public relations and outline how public relations strategies can either strengthen or weaken a business's positive public image.

Key Questions

- How do small businesses record and report financial information in a single-entry accounting system?
- What is an entrepreneur?
- What motivates a person to start a business?
- Do entrepreneurs have common characteristics?
- Are we influenced by marketing?
- How can public relations strategies impact a business's positive image?

Learning Outcomes

It is intended that students will:

- Learn how to record financial information into a single entry accounting system and report on results of a small business
- Develop an understanding of entrepreneurship
- Develop an understanding of marketing and recognise its influence on purchasing choices
- Develop an understanding of the use of public relations strategies in developing a positive public image.

Assessment Tasks

- Accounting for Small Business – case study
- Shark Tank presentation and Entrepreneur report
- Marketing and public relations of a product
- Semester exam

Humanities

Civics and Legal Studies

Learning Program

This unit will focus on students becoming active and informed citizens by providing them with valuable insights into their relationship with the law and the legal system. This unit explores the key features of Australia's political system. Students will identify and analyse the influences on people's electoral choices, compare and evaluate the key features and values of systems of government, and consider Australia's global roles and responsibilities. Students will explore factors that influence identities and attitudes to diversity as well as evaluate a range of factors that sustain democratic societies. They will also explore ways they can be active and informed citizens in different contexts.

The unit also explores the Victorian and Australian legal systems. Students will learn about the role of the High Court and discover how Australia's international legal obligations influence law and government policy. They will learn about the key principles of Australia's system of justice and analyse the role of Australia's court system. This unit considers the foundation concepts of criminal and civil law, including presumption of innocence, indictable and summary offences and the purposes and concepts of civil law.

Key Questions

- What are the key features of Australia's democracy and how is it influenced by the international community?
- What influences shape the operation of Australia's political system and how are government policies shaped by Australia's international legal obligations?
- What key principles support Victoria's and Australia's legal and court system?

Learning Outcomes

It is intended that students will:

- Analyse contemporary examples and issues relating to Australian democracy and global connections, including key aspects of citizenship in a pluralist society
- Discuss challenges to and ways of sustaining a resilient democracy and cohesive society
- Explain how Australia's international legal obligations shape Australian law and government policies, including in relation to Aboriginal and Torres Strait Islander peoples
- Describe the key features of Australia's court system, including jurisdictions and how courts apply and interpret the law, resolve disputes and make law through judgments, and describe the role of the High Court in interpreting the Constitution
- Discuss the key principles of Australia's justice system, including equality before the law, independent judiciary, and right of appeal
- Discuss the role of political parties and independent representatives in Australia's system of government, including the formation of governments, and explain the process through which government policy is shaped and developed
- Explain the values and key features of Australia's system of government compared with at least one other system of government in the Asia region.

Assessment Tasks

- Systems of government essay
- Ongoing case study and reflection journal
- Semester exam

Humanities

Geography

Learning Program

Geography takes you on a journey around the world, examining a range of global issues that impact humankind now and in the future. Issues include population pressures, destruction of the land and waterways, global warming, and human wellbeing and global conflict. Each issue is analysed and students are encouraged to develop their own informed opinion and be empowered to take action, with the purpose of making a difference in the world. A highlight of the course is a visit to Mornington Peninsula to experience firsthand the impact of various planning decisions and how these have shaped the natural environment. Students will develop knowledge about coastal environments, and research and investigate the interaction of human activities with the natural environment through the study of issues such as climate change and land degradation and through the field trip.

Key Questions

- Will we be able to sustain life on Earth with a continuously expanding population?
- Do we have a responsibility to provide more assistance or aid to the poor in the global community, or should we be putting more resources into helping the less fortunate within our own society?
- How do we learn from the mistakes of the past to ensure a sustainable future for Earth and all its inhabitants?

Learning Outcomes

It is intended that students will:

- Investigate environmental worldviews of people and their implications for environmental management
- Deepen their understanding of environmental, economic and technological factors that influence environmental change and human responses to its management
- Learn about different ways of measuring and mapping human wellbeing and development, and how these can be applied to measure differences between places
- Explore issues affecting the development of places and their impact on human wellbeing, drawing on a study from a developing country or region in Africa, South America or the Pacific Islands.

Students will develop skills that enable them to:

- Collect and record relevant geographic data and information, using ethical protocols, from reliable and useful primary and secondary sources
- Predict changes in the characteristics of places over time and identify the possible implications of change for the future.

Assessment Tasks

- Case study
- Fieldwork report
- Wellbeing research task
- Semester exam

Humanities

History

Learning Program

This unit will focus on significant events from World War II to the present day. Students will investigate wartime experiences through an in-depth study of WWII. Students will examine the causes of WWII and its impact on Australia and other countries. They will examine significant events of WWII. Students will also investigate the struggles for human rights and freedoms, especially those which have been ignored, demanded or achieved in Australia. Students will focus on significant individuals and changes that have taken place. They will also investigate the place of migration within Australia, migration experience and explore how this has shaped society through a range of perspectives and debates.

Key Questions

- What were the causes and consequences of World War II?
- What key events shape the course of World War II?
- How far has Australia come in regards to Indigenous freedoms?
- Who are the key individuals involved in the Australian struggle for rights?
- In what ways has society been shaped by migration experiences?

Learning Outcomes

It is intended that students will:

- Develop an understanding of the significant events, individuals and ideologies that caused, continued and ended World War II
- Develop an understanding of the impacts of World War II on Australia and the modern world
- Evaluate the significance of individuals, events and decisions in Australia's struggle for rights and freedoms
- Investigate the place of migration in modern Australia
- Place some of the main events and key people within a chronological framework and explain change and continuity over time (historical skills and concepts, historical knowledge, chronology).

Assessment Tasks

- World War II source analysis task
- Rights and Freedoms extended response
- Migration experiences research
- Semester exam

L'Chaim

Learning Program

In L'Chaim students are provided with a range of experiences and information to help them to fully understand themselves and their future career options. The program focuses on our students' need for full and effective participation in life, learning and work. This involves them learning more about themselves, their skills, personal attributes and interests, and more about the world of work. All students undertake career assessment and receive a professional report which highlights their skills and interests. Students also undertake a range of preparatory tasks before their Work Experience (completed in the first week of Term 3). Learning activities include exercises to increase self-knowledge, attending a tertiary excursion to providers, hearing from a range of speakers about their career choices and pathways, and investigating a 'dream' job.

Key Questions

- What are the possible pathways available for me?
- What are the education and training opportunities which will equip me for those pathways?
- What skills do I need in moving from school to employment or further education?

Learning Outcomes

It is intended that students will:

- Develop greater self-knowledge through having a realistic appreciation of their interests, values, preferences and skills
- Develop an understanding of the world of work by building their knowledge, understanding and skill needed to operate within it
- Evaluate various educational and tertiary pathways.

Assessment Tasks

- Work Experience report
- 'Me in a Minute' presentation

Languages

Chinese: Semester 1

Learning Program

Students will learn key vocabulary related to the topics of shopping, eating out and food culture. They will communicate their own personal meanings through the language. They acknowledge the need to extend and reinforce their own learning in a sequential and systematic way. Students consider the audience, purpose and appropriate language for a range of communication tasks and interact to exchange information and opinions. They use a variety of strategies for varying and extending language applications, expressing opinion and organising information. Students recognise the extent and limitation of their language and develop strategies for maximising and extending their language.

Key Questions

- What can you identify in the relationship between nature and the character writing in Chinese?
- How can you use the language to create oral and written tasks?
- How can you use strategies to recall characters when listening to texts?

Learning Outcomes

It is intended that students will:

- Identify ways in which intentions and ideas are expressed differently in different languages
- Demonstrate awareness of linguistic rules in translation between Chinese and English
- Demonstrate understanding of cultural influences on the ways people behave and use a language
- Work collaboratively, negotiate roles and delegate tasks
- Experiment with ICT for creating and learning
- Identify areas for improvement in their learning and initiate action to address them.

Assessment Tasks

- Oral task
- Comprehension tasks
- Writing task
- Cultural research task
- Semester exam

Languages

Chinese: Semester 2

Learning Program

Students will learn key vocabulary related to the topics of schooling, being sick and school culture. They will communicate their own personal meanings through the language. They acknowledge the need to extend and reinforce their own learning in a sequential and systematic way. Students consider the audience, purpose and appropriate language for a range of communication tasks and interact to exchange information and opinions. They use a variety of strategies for varying and extending language applications, expressing opinion and organising information. Students recognise the extent and limitation of their language and develop strategies for maximising and extending their language.

Key Questions

- What can you do to develop strategies for maximising your learning of the writing system?
- How can you use the vocabulary learned to create sentences for communication with others?
- Why is an understanding of key points in reading texts important?

Learning Outcomes

It is intended that students will:

- Identify ways in which intentions and ideas are expressed differently in different languages
- Demonstrate awareness of linguistic rules in translation between Chinese and English
- Use a range of strategies to assist in listening and reading comprehension
- Demonstrate understanding of cultural influences on the ways people behave and use a language
- Work collaboratively, negotiate roles and delegate tasks
- Experiment with ICT for creating and learning
- Identify areas for improvement in their learning and initiate action to address them.

Assessment Tasks

- Oral tasks
- Comprehension tasks
- Writing task
- Cultural research task
- Semester exam

Languages

French: Semester 1

Learning Program

Students will learn key vocabulary related to the topics of health, relationships and childhood. They will communicate by modelling language and by responding to prompts. They will also learn to manage open-ended communications with accurate language in the context of these topics. Learning activities will include listening, speaking, reading and writing tasks as well as tasks that integrate these macro skills with intercultural understanding and language awareness.

Key Questions

- How can I maintain a healthy lifestyle?
- How do I give advice and instructions?
- How was your childhood?

Learning Outcomes

It is intended that students will:

- Use a range of strategies to assist in listening comprehension
- Identify relevant information and ideas from written texts
- Discriminate and use appropriate punctuation, tone, intonation and meter
- Demonstrate awareness of the language
- Convey meaning by identifying how messages are communicated and use verbal and non-verbal cues
- Understand cultural influences on the way people behave and use language
- Work collaboratively, negotiate roles and delegate tasks
- Experiment with ICT for creating and learning
- Identify areas for improvement in their learning and initiate action to address them.

Assessment Tasks

- Writing task
- Comprehension tasks
- Oral task
- Semester exam

Languages

French: Semester 2

Learning Program

Students will learn key vocabulary related to the topics of the environment and career. They will communicate by modelling language and by responding to prompts. They will learn to manage open-ended communications with accurate language in the context of these topics. Learning activities will include listening, speaking, reading and writing tasks as well as tasks that integrate these macro skills with intercultural understanding and language awareness.

Key Questions

- How can we recount things that happened in the past?
- What can we do to protect the environment?
- What are your plans for the future?

Learning Outcomes

It is intended that students will:

- Use a range of strategies to assist in listening comprehension
- Identify relevant information and ideas from written texts
- Participate in interactions related to a specific topic, and recycle language
- Understand cultural influences on the way people behave and use language
- Work collaboratively, negotiate roles and delegate tasks
- Experiment with ICT for creating and learning.

Assessment Tasks

- Writing task
- Comprehension tasks
- Oral task
- Semester exam

Languages

Italian: Semester 1

Learning Program

Students will learn key vocabulary related to the topics of overseas travel, Italy as a travel destination, ecotourism, alternative holiday options, and the history of Italian migration and settlement in Australia. They will communicate by modelling language and by responding to prompts learning to manage open-ended communication with accurate language in the context of these topics. Learning activities will include listening, speaking, reading and writing tasks as well as those that integrate these macroskills with intercultural understanding and language awareness. Specific learning tasks include talking about travelling and different holiday options, Italian migration to Australia and multiculturalism in Italy and Australia.

Key Questions

- Why do people travel to Italy and around the world?
- Why did Italians migrate to Australia in the 1950s?
- What contribution has Italian migration made to Australian Society?

Learning Outcomes

It is intended that students will:

- Identify ways in which intentions and ideas are expressed differently in Italian
- Demonstrate awareness of linguistic rules in translation between Italian and English
- Use a range of strategies to assist in listening and reading comprehension
- Demonstrate understanding of cultural influences on the ways people behave and use language
- Work collaboratively, negotiate roles and delegate tasks
- Experiment with ICT for creating and learning
- Participate in interactions related to a specific topic and recycle language
- Identify areas for improvement in their learning and take action to address them.

Assessment Tasks

- Writing task
- Comprehension tasks
- Oral task
- Semester exam

Languages

Italian: Semester 2

Learning Program

Students will learn key vocabulary related to the topics of technology, environment and school and future plans. They will communicate by modelling language and by responding to prompts, learning to manage open-ended communication with accurate language in the context of these topics. Learning activities will include listening, speaking, reading and writing tasks as well as tasks that integrate these macroskills with intercultural understanding and language awareness. Specific learning tasks include talking about mobile phone usage, robots, environmental issues and caring for the environment. Other tasks include learning about the Italian education system, the world of work and the challenges faced by students as they decide their study and work futures.

Key Questions

- How do young people use technology and social media?
- What are the main environmental issues in Italy?
- What are the differences and similarities of the educational systems in Italy and in Australia?

Learning Outcomes

It is intended that students will:

- Identify ways in which intentions and ideas are expressed differently in Italian
- Demonstrate awareness of linguistic rules in translation between Italian and English
- Use a range of strategies to assist in listening and reading comprehension
- Demonstrate understanding of cultural influences on the ways that people behave and use language
- Work collaboratively, negotiate roles and delegate tasks
- Experiment with ICT for creating and learning
- Participate in interactions related to a specific topic and recycle language
- Identify areas for improvement in their learning and take action to address them.

Assessment Tasks

- Writing task
- Comprehension tasks
- Oral task
- Semester exam

Mathematics

Pre-General Mathematics: Semester 1

Learning Program

Students will use digital technology to summarise data sets and produce boxplots. They will solve problems involving linear equations, including those derived from formulae. Students will devise and analyse linear simultaneous equations using graphical techniques. Students will explore right-angled triangle scenarios including those involving bearings and angles of elevation and depression. They will describe the results of chance events and assign and determine probabilities.

Key Questions

- How can statistics and displays of statistical information be used to compare univariate data sets?
- How can we graphically represent and solve problems involving linear relationships?
- How can probabilities for independent and conditional events be determined?
- How can we solve for unknown angles or sides in a right triangle?

Learning Outcomes

It is intended that students will:

- Determine quartiles and interquartile range
- Compare shapes of boxplots to corresponding histograms and dot plots
- Solve problems involving linear equations, including those derived from formulae
- Sketch linear graphs and determine the gradient between two points
- Solve right-angle triangle problems involving Pythagoras' Theorem and trigonometry
- Describe the results of two- and three-step chance experiments, both with and without replacements
- Assign probabilities to outcomes and determine probabilities of events
- Investigate the concept of independence
- Use the language of 'if ... then', 'given', 'of', 'knowing that' to investigate conditional statements and identify common mistakes in interpreting such language.

Assessment Tasks

- Topic tests on key knowledge and skills
- Problem solving and modelling tasks
- Semester exam

Mathematics

Pre-General Mathematics: Semester 2

Learning Program

Students will describe, interpret and sketch parabolas and their transformations using digital technologies as appropriate. Students will list outcomes, assign probabilities and determine probabilities for chance experiments and investigate independent events and use the language of probability. They will solve right-angled triangle problems using Pythagoras' theorem and trigonometry and investigate the tests for similar triangles. Students will solve problems on simple and compound interest in exploring financial arithmetic and will be introduced to the Networks area of study, and terms such as cycles, paths, trails and walks.

Key Questions

- How can we find the surface area and volume of composite solids?
- What are the key features of parallel and perpendicular lines?
- What is the connection and difference between simple and compound interest?
- How can scatter plots, generated by digital technology, be used to describe the relationship between two continuous variables?
- How can a graph be converted to a planar graph, and then Euler's formula applied?

Learning Outcomes

It is intended that students will:

- Use rules relating to parallel and perpendicular lines in geometry
- Solve problems involving surface area and volume for a range of prisms, cylinders and composite solids
- Investigate and describe bivariate numerical data including when the explanatory variable is time
- Use recursion to model simple interest, compound interest, flat rate depreciation and reducing balance depreciation
- Know the difference between a walk, trail, cycle, path and a circuit.

Assessment Tasks

- Topic tests on key knowledge and skills
- Problem solving and modelling tasks
- Semester exams

Mathematics

Pre-Methods Mathematics: Semester 1

Learning Program

Students will define rational and irrational numbers and perform operations with surds and fractional indices. They will represent relations on the Cartesian plane and solve problems involving parallel and perpendicular lines. They will find unknown values after substitution into formulae. Students will establish and apply the index laws. They will expand and factorise monic and non-monic quadratic expressions. Students will solve linear and quadratic equations and inequations.

Key Questions

- How can we solve problems involving linear equations or linear inequalities?
- What are the various methods that can be used to solve a pair of simultaneous linear equations?
- What are the key features of a quadratic equation and how can the equation be factorised and any solutions determined?
- How do we perform operations with rational and irrational numbers as well as with surds and fractional indices?

Learning Outcomes

It is intended that students will:

- Describe, interpret and sketch parabolas and their transformations
- Describe the results of two-and three-step chance experiments, both with and without replacements
- Assign probabilities to outcomes and determine probabilities of events
- Investigate the concept of independence
- Solve right-angled and similar triangle problems
- Calculate the surface area and volume of cylinders, pyramids, spheres and cones.

Assessment Tasks

- Topic tests on key knowledge and skills
- Problem solving and modelling tasks
- Semester exams

Mathematics

Pre-Methods Mathematics: Semester 2

Learning Program

Students will describe, interpret and sketch parabolas and their transformations along with hyperbola, truncus, circles and exponential functions. They will explore the connection between algebraic and graphical representations of relations such as simple quadratics, and exponentials, using digital technologies as appropriate. Students will list outcomes, assign probabilities and determine probabilities for chance experiments and investigate independent events and use the language of probability. They will solve right-angled triangle problems using Pythagoras' Theorem and trigonometry.

Key Questions

- How can exponential equations be solved and graphed?
- How can the equation of a parabola, a truncus, and a hyperbola be recognised and graphed?
- How can similarity, congruence and trigonometry be used to solve practical problems involving lengths, angles and areas in plane shapes?
- How can probabilities for multi-step events that are both dependent and independent be determined?

Learning Outcomes

It is intended that students will:

- Describe, interpret and sketch parabolas, hyperbola, truncus, and exponential functions and their transformations
- Describe the results of two- and three-step chance experiments, both with and without replacements
- Assign probabilities to outcomes and determine probabilities of events
- Investigate the concept of independence
- Solve right-angled triangle problems including those involving direction, angle of elevation and depression, and three-dimensional problems.

Assessment Tasks

- Topic tests on key knowledge and skills
- Problem solving and modelling tasks
- Semester exams

Science

Pre-Biology

This elective is designed to prepare students to study VCE Biology.

Learning Program

Students study the transmission of inheritable characteristics from one generation to the next. They will explore DNA, genes and chromosomes and patterns of inheritance. Students explore the central dogma of molecular biology, understanding how the genetic information in DNA is ultimately translated into proteins Students will also study evolution by natural selection and the biodiversity of life on Earth. They are able to relate genetic diversity to biodiversity.

Key Questions

- How do cells make us who we are?
- How do genes make us unique?
- What are the building blocks of all living things?
- How did life evolve and populate the earth?
- What mechanisms see life survive, reproduce, evolve and become extinct?

Learning Outcomes

It is intended that students will:

- Describe the role of DNA as the blueprint for controlling the characteristics of organisms
- Use models and diagrams to represent the relationship between DNA, genes and chromosomes
- Recognise that genetic information passed on to offspring is from both parents by meiosis and fertilisation
- Describe mutations as changes in DNA or chromosomes and outline the factors that contribute to causing mutations
- Explore the different organelles of animal and plant cells Understand how various characteristics and traits are passed on through families
- Apply three-way tables to elaborate on amino acids and their importance in the human body
- Outline processes involved in natural selection including variation, isolation and selection
- Describe biodiversity as a function of evolution
- Investigate 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
- Relate genetic characteristics to survival and reproductive rates
- Evaluate and interpret evidence for evolution, including the fossil record, chemical and anatomical similarities, and geographical distribution of species.

Assessment Tasks

- Topic tests
- Case study
- Practical reports
- Semester exam

Science

Pre-Chemistry

This elective is designed to prepare students to study VCE Chemistry.

Learning Program

Students will develop an understanding of the structure and organisation of the periodic table, including trends and patterns that inform the properties of elements. They will investigate chemical bonding, including ionic, covalent, and metallic bonds, and analyse how bonding and structure influence the physical and chemical properties of substances.

The course also explores chemical reactions, with a focus on writing and balancing chemical equations, and classifying different reaction types, including combustion and redox reactions. Students will examine the reactivity of elements and the role of redox processes in chemical systems.

In addition, students will extend their scientific inquiry skills through a student-designed investigation, exploring either redox chemistry or organic chemistry, and applying their understanding to experimental design, data analysis, and evaluation within a scientific context.

Key Questions

- How do elements and their interaction govern our world?
- Where do we see chemical reactions in our daily lives?
- How does chemical structure determine the properties of materials?
- Where do we see and use chemistry in our daily lives?

Learning Outcomes

It is intended that students will:

- Recognise that elements in the same group of the periodic table have similar properties
- Describe the structure of atoms in terms of electron shells
- Include trends of the periodic table – atomic radii, electronegativity, ionsiation energy and core charge
- Explore covalent, ionic, metallic, and intermolecular bonding
- Introduction to organic chemistry including hydrocarbons and fuels
- Investigate redox reactions.

Assessment Tasks

- Topic tests
- Experimental design task
- Semester exam

Science

Environmental Sustainability & STEM

Learning Program

Environmental Sustainability & STEM introduces students to Earth's interconnected systems – atmosphere, biosphere, hydrosphere, and lithosphere – and the impact of human activity on these systems. Through a STEM-based, project-driven approach, students explore real-world environmental issues such as climate change, biodiversity loss, and sustainability. Students engage in scientific inquiry, fieldwork, data analysis, and ethical decision-making while developing and testing hypotheses, evaluating human impact, and designing sustainable solutions.

Key Questions

- What are your views on climate change?
- How do global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere?
- What role do ethics and values play in environmental decision-making?
- How can we design scientifically sound, sustainable solutions to reduce human impact on ecosystems?
- What are the challenges and trade-offs involved in creating a more sustainable future?

Learning Outcomes

It is intended that students will:

- Explain the structure and function of Earth's four systems (biosphere, atmosphere, hydrosphere, lithosphere) and how they interact
- Describe and analyse the impact of human activities (e.g. deforestation, fossil fuel combustion, agriculture) on natural systems and global climate
- Model and interpret the carbon cycle and explain its significance in climate regulation
- Design and conduct scientific investigations using inquiry skills, including formulating hypotheses, identifying variables, and collecting and analysing data
- Evaluate carbon sequestration in ecosystems through measurement and calculation (e.g. tree biomass, soil carbon)
- Calculate and assess an individual's carbon footprint and develop realistic strategies to reduce emissions
- Interpret and construct scientific representations such as models, graphs, food webs, and data tables
- Communicate scientific ideas clearly using appropriate terminology, conventions, and evidence-based arguments
- Discuss and apply ethical considerations in relation to environmental decision-making and stakeholder perspectives
- Predict environmental changes and assess mitigation and adaptation strategies based on scientific evidence
- Demonstrate critical thinking by reflecting on the role of science, technology, and society in shaping sustainable futures.

Assessment Tasks

- Tests
- Carbon Footprint Analysis of Data and Reduction plan
- Semester exam

Science

Pre-Physics

This elective is designed to prepare students to study VCE Physics.

Learning Program

Students will study motion; speed, velocity, and acceleration. They will be able to graph motion, explain energy change and conservation including collisions and the physics behind car safety. Students will explore energy and use of electricity including Ohm's Law, current, voltage, and resistance and will look at the Physics behind something which many of us take for granted. They will build electronic circuits, use digital technology to record and analyse motion and use applications to interpret and graph the results.

Key Questions

- How do I predict the motion of objects?
- What are the implications of Newton's three laws of motion?
- How and why is energy conserved?
- What are the sources of electricity?
- How is electricity generated?
- Why does electricity behave differently in various circuits?
- How can I use circuit diagrams to build physical circuits accurately?
- What problems can occur when building a circuit, and how can we identify and fix them?

Learning Outcomes

It is intended that students will:

- Give both qualitative and quantitative explanations of the relationships between distance, speed, acceleration, mass and force to predict and explain motion
- Explain the implications of Newton's laws and energy conservation
- Use the concepts of voltage and current to explain the operation of electric circuits and use a field model to explain interactions between magnets
- State the difference between current, voltage and resistance
- Describe how various energy sources are used to generate electricity
- Compare the advantages and disadvantages of renewable and non-renewable energy sources
- Identify and describe the basic function of electronic components such as resistors, LEDs, switches and batteries
- Troubleshoot common circuit problems such as open circuits, short circuits, or incorrect component placement.

Assessment Tasks

- Tests – Motion and Electricity
- Semester exam

Science

Sceptics and Conspiracy

This elective is designed to address scientific literacy while covering the core Science curriculum.

Learning Program

Students will investigate the thinking behind the scientific method and compare it with conspiracy theories and urban myths. They will use critical thinking to examine stories around ideas like dowsing, 5G, COVID links and the disappearance of Harold Holt. The appeal of conspiracy theories and the personality traits that make people vulnerable to them will be considered. The effect of AI on conspiracies will also be investigated.

In the astronomy topic, students will explore the origins and development of the universe, including the Big Bang theory, redshift, and the formation of stars, galaxies, and planetary systems. They will review the history of space exploration, focusing on the Space Race, and the roles of significant figures such as Yuri Gagarin and the Apollo missions. They will investigate the boundary between science and myth by examining public beliefs and scientific facts about Halley's Comet, shooting stars, meteorites, Pluto's reclassification and conspiracy theories like Planet Nibiru.

For the biology study, students will identify and describe agents of infectious disease such as bacteria and viruses. Comparison will be made of the human body's three lines of defence, with particular focus on the adaptive immune system and the generation of antibodies. This will be used to evaluate the claims of anti-vaxxers and understand the scientific basis of vaccination. Students will critically assess common misconceptions surrounding vaccines, including those related to herd immunity, vaccine safety, and the role of immune memory.

To explore scientific misinformation, students will look at common health-related myths, such as hydration guidelines, and investigate the scientific evidence behind them. Using the tobacco industry as an example, they will develop critical thinking skills by distinguishing between scientific fact, pseudoscience, and marketing claims related to personal health. Students will explain the placebo effect and discuss how belief and perception can influence health outcomes.

Key Questions

- Why do conspiracy theories persist, even when there is overwhelming scientific evidence against them?
- How do we know the universe had a beginning and what evidence supports the Big Bang theory?
- What makes the scientific method more reliable than anecdotal evidence or intuition?
- What scientific evidence challenges the claims made by anti-vaxxers?
- Why do some people reject vaccines despite clear scientific evidence of their safety and effectiveness?
- How can we distinguish between health advice based on science and that based on pseudoscience or profit?

Learning Outcomes

It is intended that students will:

- Construct evidence-based arguments and use appropriate scientific language, when communicating their findings and ideas for specific purposes
- Analyse how models and theories have developed over time and discuss the factors that prompted their review
- Predict how future applications of science and technology may affect people's lives
- Explain how they have considered reliability, precision, safety, fairness and ethics in their methods
- When selecting evidence and developing and justifying conclusions, account for inconsistencies in results and identify alternative explanations for findings
- Evaluate the validity and reliability of claims made in secondary sources with reference to currently held scientific views.

Assessment Tasks

- Tests
- Presentation
- Practical folio
- Semester exam

Science

Mind Matters

This elective is designed to prepare students for VCE Psychology

Learning Program

Students will learn about Psychology as the study of one's thoughts, feelings and behaviour. Students will have a basic introduction to Psychology and research methodologies. A key component of psychological research and investigation is centred around the nature versus nurture debate to explain the human experience. This will inform the discussion and exploration of ideas across all topics for this subject. Students will learn more about the human nervous system and the areas of the brain. Students will learn about Forensic Psychology as a career and the psychological theories and concepts surrounding criminal behaviour. A case study investigation will take place through an immersive, collaborative experience to solve a crime, using skills surrounding criminal profiling. Students will examine specific forensic psychology case studies and identify similar patterns of behaviour exhibited by known criminals. Students will learn about Positive Psychology exploring what it means to be happy, surrounding concepts of altruism, pro-social behaviour, wellbeing and health. Students will conduct a practical investigation to apply research methodologies, and evaluate the appropriateness of the experimental design and methodology.

Key Questions

- What is Psychology as a science?
- What are research methodologies?
- How does our brain work?
- What is normal behaviour? What is abnormal behaviour?
- What is Forensic Psychology?
- What is criminal profiling?
- What are the factors that influence happiness?
- What happens in our brain when we experience happiness (neurochemistry)?

Learning Outcomes

It is intended that students will:

- Understand Psychology as a science and a profession
- Describe the structure and function of the brain
- Explore the structure of the brain and how it affects our mental processes, behaviour and health
- Explore the area of Forensic Psychology
- Investigate explanations for criminal behaviour
- Explore the area of Positive Psychology
- Investigate the role of positive attitudes in influencing behaviour
- Conduct experiments and evaluate the appropriateness of the experimental design and methodology.

Assessment Tasks

- Topic test
- Research presentation
- Media analysis and practical investigation
- Semester exam

Technologies – Design and Technologies

Food Studies – Food by Design

Learning Program

The course comprises both practical and theoretical tasks that educate students about the design process. Students will be encouraged to source recipes that challenge and extend their food preparation skills. They will complete a design brief that involves investigating and generating ideas, planning, managing, producing and evaluating their developing skills. Students will be required to work both independently and collaboratively on food production challenges. Students apply sequenced production plans safely and skilfully to assist with the production of a desired outcome, modifying plans where appropriate.

Key Questions

- How can you be challenged and extend your food preparation skills?
- How can we work sustainably in Food Studies?

Learning Outcomes

It is intended that students will:

- Follow the design process to produce recipes consisting of simple and complex processes, evaluating their skills and sensory characteristics of food to reflect on outcomes.
- Work safely with a range of tools and equipment to produce or modify products
- Investigate various food allergies and intolerances
- Investigate and make judgements on the ethical and sustainable production of food.

Assessment Tasks

- Design folio
- Production records
- Nutrition and Design Process Test
- Semester exam

Technologies – Design and Technologies

Food Studies – Food Styling

Learning Program

This course comprises both practical and theoretical aspects that inform students about the design, functions and promotion of a range of ingredients and products. Students acquire skills to prepare challenging recipes relating to key ingredients. In addition, they learn the techniques of food styling and photography. Students are required to work independently and collaboratively.

Key Questions

- Why does food look so good in television commercials and glossy magazines?
- Have you ever wondered about the ingredients in recipes and their functions?
- Are you interested in improving your food preparation skills?

Learning Outcomes

It is intended that students will:

- Reflect on a range of influences on personal and family food selection and nutritional needs for growth and activity
- Work collaboratively contributing to, supporting others and reflecting on individual and team performance in responding to design briefs and implementing design plans, working safely with a range of tools and equipment to produce and/or modify products and evaluate the process
- Build skills in the kitchen through processes such as reasoning, processing, evaluating and inquiry.

Assessment Tasks

- Food photography activities
- Design brief
- Food productions skills
- Semester exam

Technologies – Digital Technologies

Textiles

Learning Program

Students will have the opportunity to explore the role of textiles in society. They will complete design tasks and create practical textile artworks using the core components of the design process: investigating and generating, planning and managing, producing and evaluating. They will explore fabric, print and patterns and use a range of fabric production techniques and processes.

Key Questions

- What role do textiles play in society?
- How can you use your inspiration to create textile pieces?

Learning Outcomes

It is intended that students will:

- Investigate, design and produce textile works
- Develop skills in making decisions about creative ways of generating and implementing ideas
- Select, vary, experiment with and manipulate materials, techniques and aesthetic qualities to effectively realise their ideas
- Experiment with imaginative and innovative ways of using traditional and contemporary skills, techniques and processes and a variety of media, materials, equipment and technologies
- Evaluate and reflect on their experiences and observations and consider what they have learned about styles and forms through annotations in their visual journal.

Assessment Tasks

- Design and investigation journal
- Textile production
- Analysis task
- Semester exam

Technologies – Digital Technologies

Cyber Forensics

Learning Program

Cyber forensics is the application of computer investigation and analysis techniques to gather evidence. The goal of computer forensics is to perform a structured investigation while maintaining a documented chain of evidence to find out who did the crime digitally. This is a hands-on course for students to learn about the threats, ways of protecting systems and the variety of roles in this area.

As a forensic investigator, students examine cybercrime. They look at case studies and research cyber criminal activity that is in the news.

Students investigate computer hacking and societal issues that arise because of technology. They will analyse problems and develop solutions to information problems, both individually and in collaborative teams. They test themselves to see how well they can avoid being 'scammed'.

Key Questions

- Would you like to learn about different types of cyber crime?
- Would you like to experience the role as a Digital Forensic Investigator?
- Would you like to learn about computer security to protect computer systems and networks?
- Would you like to learn how to keep safe online?

Learning Outcomes

It is intended that students will:

- Research cyber criminal activity
- Learn about the different cyber threats to individuals and to businesses
- Learn how to protect systems from these threats
- Discover what employment might look like in the field of CyberSecurity

Assessment Tasks

- Research cyber crimes
- Create a security awareness training package for Our Lady of Sion College
- Cyber security job poster

VERITAS IN CARITATE

Our Lady of Sion College
1065 Whitehorse Road,
Box Hill Vic 3129
info@sion.catholic.edu.au
sion.catholic.edu.au