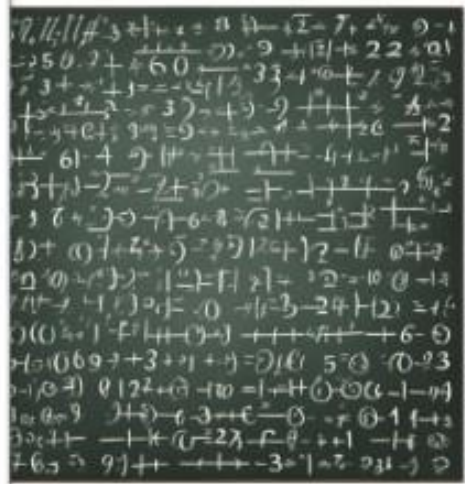




Marian College  
Ararat



Subject Selection  
Handbook  
2025

Middle School

# ***Our College Vision***

*Marian College is a dynamic and nurturing Kildare Education Ministries Catholic College in the Brigidine tradition.*

*We are committed to ensuring a vibrant and challenging educational environment of learning and personal growth.*

*Our safe supportive environment will empower our young people to become part of a generation responsible for bringing positive change to our world.*





## Kildare MINISTRIES

*Kildare Ministries is inspired  
by the transformative vision  
of the Christian story  
and our rich traditions.*

### Our Vision

A community where all people are valued, where all creation is recognised as sacred and where hope, justice and courage are our hallmarks.

### Our Mission

Responding to the changing needs of our world, we strive to build inclusive communities through the provision of education and community works.

#### Wonder

Celebrating all that is good with joy and gratitude

#### Justice

Making the needs of the vulnerable paramount

#### Courage

Speaking and acting with integrity

### Our Values

#### Compassion

Walking with and having empathy for all

#### Hospitality

Welcoming all

#### Hope

Bringing a sense of purpose

Kildare Ministries 54 Beaconsfield Parade Albert Park VIC 3206 Phone 03 9682 2973

[www.kildareministries.org.au](http://www.kildareministries.org.au)



# College Overview

## Strength and Gentleness

Established by the Brigidine sisters on its current site in 1889, Marian College prides itself on its very long commitment to providing high quality learning and teaching for young men and women of the Grampians-Ararat-Stawell region.

Marian College is a Kildare Education Ministries school in the Brigidine tradition that continues to offer high quality educational opportunities and experiences, which will shape our students in positive ways throughout their lives.

At Marian College we seek to provide an education that empowers students to become life-long learners, who are encouraged to think creatively, to analyse critically, to respond intelligently, and with thought and compassion for others.

As a Catholic learning community we endeavour to keep the Gospel values at the heart of our school, and actively promote high expectations, respectful communications, perseverance, tolerance, compassion, justice and service.

Our Learning and Teaching programs are designed:

- to be challenging and responsive to emerging needs in education that are tailored to support personalised learning pathways,
- to promote innovation and creative thinking,
- to embrace contemporary technologies and real-world experiences,
- and to excite the imagination and passion in the pursuit of excellence.

Students are encouraged to excel and to work towards continual improvement to achieve their best. We are very proud of our strong Brigidine identity and ethos, where staff actively promote and nurture the spiritual, intellectual, emotional, physical and social growth of all students.

Teaching staff work collaboratively and reflectively in Professional Learning Teams to continue to remain at the forefront of advancing teaching and learning practices. They endeavour to model learning and a passion for learning, providing ongoing effective feedback for continual improvement.

Our Teacher Advisor (T.A.) program represents an integral element of our mission. Each Teacher Advisor is the advocate and role model in the lives of the students in their care. They support these students academically and socially throughout their secondary journey. In partnership with parents, they help guide students to flourish and grow into thoughtful young people who can contribute positively to the world.

At Marian College we challenge our students to be people of courage and action, and to find their voice and place in the world.



# The Culture of Learning at Marian College



Our Commitment to learning:

We encourage excellence and perseverance in learning

We strive for continuous improvement

FORTITER ET SUAVITER

## Student Learning – Action Statement

### I WILL:

- Learn in every lesson
- Come prepared for every lesson in attitude and action
- Respect the learning environment
- Respect the rights of others to learn
- Accept new challenges
- Persevere and complete all tasks to the best of my ability
- Accept feedback as a chance to grow

MARIAN COLLEGE





# Focus of each Year Level

## **Year 9 – A Year of Personal Development**

Year 9 and 10 are exciting and important years in the intellectual, physical and social emotional development of our young people and Marian College strongly encourages all students to make the most of every learning opportunity made available to them. It is often through leaving one's comfort zone and trying something new that a new talent or ability is identified or a lifelong hobby or interest developed.

In Year 9, careful consideration should be given to the selection of electives and subject outlines need to be read carefully. If you are unsure about what electives your child/ren should choose, please make contact with your child's TA or subject teachers.

## **Year 10 – A Year of Considering the Future**

By Year 10, it is very likely that you will have changed your ideas about career choices several times, so it is important to consider the options which will best allow you to achieve your potential.

At Year 10 you will study a number of core subjects which contain options within them and you will also select several elective units for each Semester.

A number of VCE and VET Units 1 & 2 are also offered at Year 10, however, students are required to apply for one of these subjects. The option of VCE and VET will depend on the blocking as well as the academic performance of students in Year 9.



# Selecting your Subjects

## Years 9 and 10

The subjects for Years 9 and 10 have core learning units, core electives and general electives, with Year 10 then also having the option of accelerated learning. Subject selections should be made in consultation with subject teachers, parents and Faculty Heads, remembering it is important to keep the right balance.

Once subjects are selected and accepted, it is proposed that the student's program will remain in place for the year.

## Acceleration

In Year 10, acceleration is not for all students. In some circumstances, the extra workload may have a negative effect on the student's wellbeing and academic progress.

Students who choose to apply for this option should do so with the clear understanding that completing a VCE subject requires strict adherence to the Victorian Curriculum and Assessment Authority and the rules associated with VCE.

The decision to attempt a VCE subject above the current year level should not be seen as a 'trial run', but as an important decision that will have impacts on all other subject choices and the availability of subjects that can/will run within the school. It must also be considered in the light of the availability within the timetable and whether or not your child's TA and Semester Reports indicate that acceleration is the right option.

Except in exceptional circumstances students will only be permitted to undertake one accelerated subject sequence.

In terms of 'process' moving forward, if your child wishes to complete a VCE subject above their year level, ie, they are in Year 10 and would like to study a Unit 1 & 2 subject, or year 11 and want to study a Unit 3 & 4 subject, they will need to apply to the relevant Head of Faculty and follow the application process. Acceleration Application forms can be obtained via the front office.

## New Students

Subject selection and timetable planning for new students will be completed by the Head of Learning and Teaching.



# Year 9 Course of Study

All Year 9 students must study the following subjects:

- Religious Education
- English
- Mathematics
- Science
- Humanities
- Physical Education and Health
- Wellbeing

## Electives

- Year 9 students choose 6 electives.

Elective choices are based on the number of students who select that subject. We cannot guarantee that all elective choices will run.

### **IMPORTANT:**

All Subject selections **MUST** be completed online **via Web preferences** by Friday 16th August 2024.

Students will receive an email from Web preferences for access to the student portal.





# Year 10 Course of Study

All Year 10 students must study the following subjects:

- Religious Education
- English
- Mathematics: General and Methods
- Science (minimum 3 terms of Science)
- Humanities (minimum 3 terms of Humanities)
- Physical Education and Health
- Wellbeing

## Electives \*

- Year 10 students choose 6 electives. If they choose to complete a VCE subject this will replace 4 of those 6 choices.

### **IMPORTANT:**

All Subject selections **MUST** be completed online **via Web preferences** by Friday 16th August 2024.

Students will receive an email from Web preferences for access to the student portal.



# VCE Accelerated Learning Options

The subjects on this list are the only options available for Year 10 Accelerated Learning\*:

## Science

- Biology Units 1 & 2
- Psychology Units 1 & 2

## Physical Education and Health

- Health and Human Development Units 1 & 2
- Physical Education Units 1 & 2

## Humanities

- Business Management Units 1 & 2
- Legal Studies Units 1 & 2
- History Units 1 & 2

## The Arts

- Art Making and Exhibiting Units 1 & 2
- Music Performance Units 1 & 2

## Technology

- Product Design & Technology (Textiles or Wood, Metal & Plastics) Units 1 & 2
- Systems Engineering Units 1 & 2
- Food Studies Units 1 & 2

Acceleration Application Forms can be collected via the front office.

*\*Subjects offered are dependent on numbers*



# Expectations for students studying a VCE subject

The Victorian Curriculum and Assessment Authority sets out guidelines that have to be strictly adhered to by teachers and students.

Students are expected to:

- Produce work that meets the required standard;
- Submit work on time;
- Submit work that is clearly his or her own; and
- Observe VCAA and school rules.

Most of the assessment sections of the unit outcomes (SAC's – School Assessed Coursework) are completed in class. This ensures that work can be authenticated by teachers. This does not preclude normal expectations for a student to complete research and learning activities outside of class time. Some tasks for assessment of outcomes may in fact require preliminary preparation prior to completion of work in class.

It is important to note that school policy states:

*'...students will be given one week to do the work that was not submitted on the due date, or one week to resubmit work that was unsatisfactory.'*

This is at the discretion of the relevant teacher.

Graded results from the first attempt of an assessment task cannot be changed. However, assessment tasks can be redeemed to pass the unit.

The school has a policy, in line with the VCAA guidelines, that students have a minimum of 80% attendance.

If a SAC is missed, students must obtain a medical certificate. This will enable the student to receive a fully graded SAC. Without a medical certificate, the grade will be zero. If a student wishes to change a SAC date, an application stating the reason must be made. Sanctioned applications are rare, and will be fully graded.

Emphasis is placed on students becoming self-directed, developing skills to formulate patterns of work and homework/study timetables. Unit 1 & 2 – students should spend 2-3 hours a night on homework and Units 3 & 4 requires 3-4 hours of homework per night. Several hours of homework on the weekend is also necessary to keep on top of the workload. Study is essential and is an integral part of the work, not left until exam time.

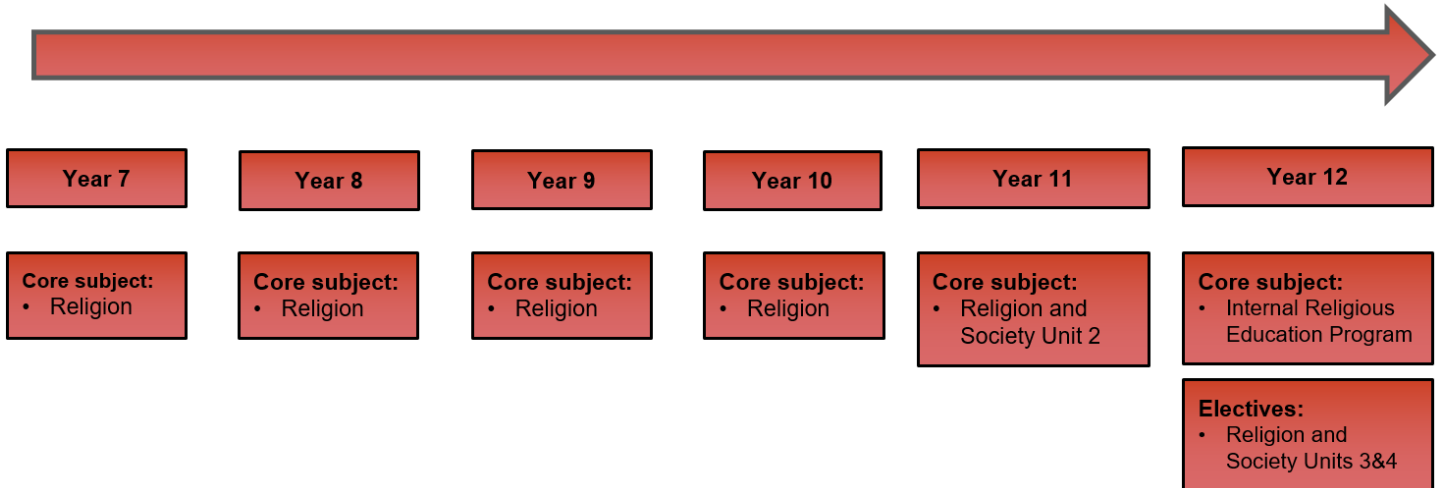
## **IMPORTANT:**

All Subject selections **MUST** be completed online **via Web preferences** by Friday 16th August 2024.

Refer to your student email from web preferences for access to your student portal.



# Religious Education



Enrolment at Marian College is an invitation to “come and see” in the spirit of the Gospel invitation of Jesus, within the framework of our Catholic faith, Kildare Ministries values, and our Brigidine Tradition.

The Religious Education experience at Marian College is not just a strong part of our curriculum, but entrenched in our whole school culture and community. It aims to develop religiously literate young people who understand and appreciate religious values, are positive about life, have a sense of their own worth and of their contribution to the world, and are able to apply the Gospel values they have acquired in the context in which they live and work.

At a curriculum level, our Religious Education Program from Year 7-10, follows the Awakenings Guidelines mandated for use in Catholic schools in the Ballarat Diocese. Our strands of study cover Christian Ethics – Personal and Social, Church & Tradition, God Religion and Society, Prayer, Liturgy and Sacraments, and Scripture, Israel and Jesus.

In the Senior Years, the Year 11 students study a single unit of Religion that counts towards their VCE.

Our Year 12 VCE students participate in an internal Religious Education Program. Students studying VCE Vocational Major are also involved in Personal Development Skills Units aligned with their VCE VM Program.



# Religious Education

## Year 9

### Core Subjects:

#### Religion

Year 9 students study the following units of work for Religious Education:

- Who is Jesus?
- Eucharist – Source of Life
- Stewardship
- Making Christian Decisions

The Awakenings units are also complemented by Marian College areas of study in Kildare Ministries values, Lent, Easter and the Stations of the Cross.

## Year 10

### Core Subjects:

#### Religion

Year 10 students study the following units of work for Religious Education:

- The Church through Time
- Celebrating Religious Diversity
- Discernment in Decision Making
- Prophets and Saints


The Awakenings, units are also complemented by Marian College areas of study in Kildare Ministries values, Lent, Easter and the Stations of the Cross as well as the Year 10 Retreat and Community Service Program.



# CAL Hub

## (Culture and Languages)

# English



Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
<b>Core subjects:</b> <ul style="list-style-type: none"> <li>English</li> <li>Chinese</li> </ul>	<b>Core subjects:</b> <ul style="list-style-type: none"> <li>English</li> <li>Chinese</li> </ul>	<b>Core subjects:</b> <ul style="list-style-type: none"> <li>English</li> </ul>	<b>Core subjects:</b> <ul style="list-style-type: none"> <li>English</li> </ul>	<b>Core subjects:</b> <ul style="list-style-type: none"> <li>English Units 1&amp;2 <i>and/or</i></li> <li>Literature Units 1&amp;2</li> </ul>	<b>Core subjects:</b> <ul style="list-style-type: none"> <li>English Units 3&amp;4 <i>and/or</i></li> <li>Literature Units 3&amp;4</li> </ul>
		<b>Electives:</b> <ul style="list-style-type: none"> <li>Creative Writing and Literature</li> </ul>	<b>Electives:</b> <ul style="list-style-type: none"> <li>Creative Writing and Literature</li> </ul>		

## Year 9

### Core Subjects:

### English

The Year 9 English course consists of an overarching idea which is the focus for each semester and stems from each semester's core text. The ideas and issues examined in the core text form the basis for the semester's learning activities and assessment tasks. Students also examine a variety of additional texts (such as short stories, media texts, poems and visual texts). During their study of texts students build critical thinking and inferencing skills as well as developing their vocabulary. The focus on current media issues relevant to ideas examined in the core text, provides opportunity for students to further their understanding of media text features and language and argument development techniques.

Writing skills are practiced by responding to the texts studied and the concerns raised in a range of forms (such as an analytical essay, a comparative essay, a creative piece or a persuasive piece). Meta-cognitive skills are developed through reflecting on the purpose, audience, form of student written texts and decisions made during the writing process.



# English

## Year 9

### **English *continued***

Listening skills are practiced every day in the English classroom. Students are encouraged to listen respectfully to each other's ideas and learn from each other. Classroom and small group discussion are a staple of the English class. Speaking skills and the ability to articulate ideas verbally are practiced through a variety of informal oral activities and formal presentations.

### **Elective:**

### **Creative Writing and Literature**

The focus of this subject is to encourage students to refine their creative writing skills in the genre and style they are most comfortable with while also studying the writing techniques and ideas of authors. Students read texts such as short stories, excerpts from novels, plays and poetry and they study film and filmic techniques with consideration of the choices directors make in the construction of a filmic text.

There is an emphasis placed on the process of writing (ie learning how to effectively plan, draft, rewrite an edit) in order to achieve a desired effect on the audience, and exploring the connection between form, purpose and audience.

The classes are designed to encourage students to formulate their personal opinions and share them in a welcoming environment. Students respond to texts both critically and creatively, with assessment based on written responses to texts including personal responses, analytical responses, creative pieces and writing portfolios.



# English

## Year 10

### Core Subjects:

#### English

In Year 10 there is an emphasis on consolidating previously developed skills and preparing students for what they will encounter in their VCE studies. Students will develop their skills in analysing and comparing texts, analysing language and argument as well as developing their craft of writing. Through the study of issues in the media students develop a critical understanding of contemporary media and media texts.

The Year 10 English course consists of an overarching idea for each semester which stems from a focus on the themes of human and cultural significance and ethical and global issues. A core text featuring these themes is the focus of study for each semester. A variety of additional texts are also used to supplement the core textual study. During their study of texts students build upon their critical thinking and inferencing skills as well as developing their vocabulary. Students are encouraged to develop their own interpretations of texts and articulate these through analytical, creative and comparative responses. The increased focus on analysing language and argument in media texts, provides opportunities for students to further their understanding of persuasive language and argument techniques.

Writing skills are practiced by responding to the texts studied and their ideas and issues in a range of forms (such as an analytical essay, a comparative essay, a creative piece or a persuasive piece). Meta-cognitive skills are developed through reflecting on the purpose, audience, form of student written texts and decisions made during the writing process.

Listening skills are practiced every day in the English classroom. Students are encouraged to listen respectfully to each other's ideas and learn from each other. Classroom and small group discussion is a staple of the English class. Speaking skills and the ability to articulate ideas verbally are practiced through a variety of informal oral activities and formal presentations.



# English

## Year 10

### Elective:

#### **Creative Writing and Literature**

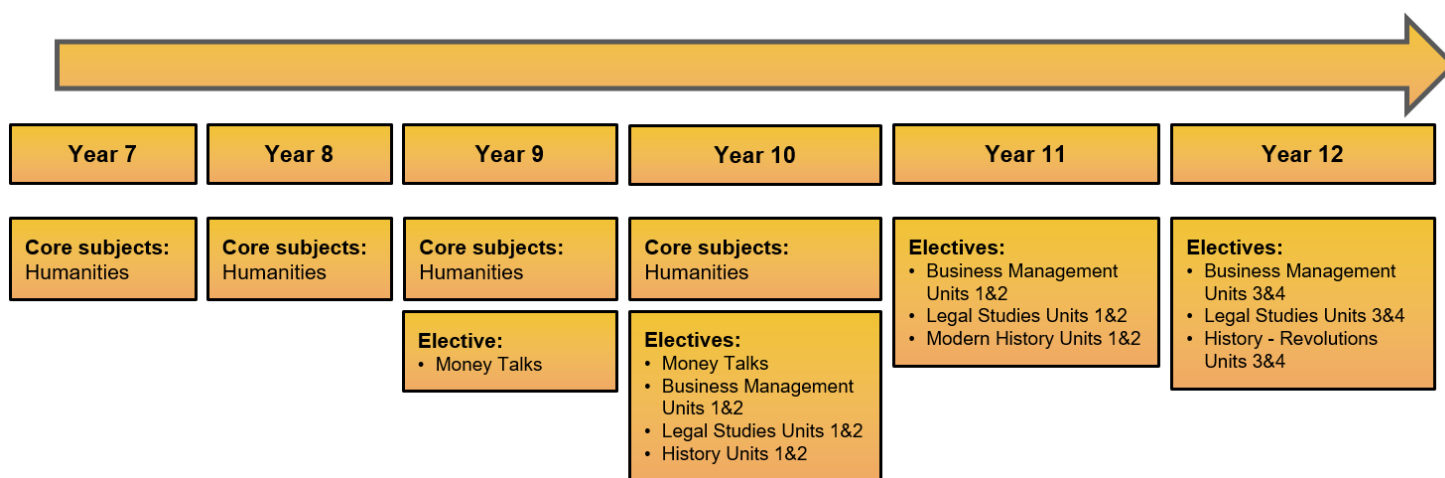
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# Humanities



## Year 9 and 10

### Core Subjects:

The Humanities provide a framework for students to examine the complex processes that have shaped the modern world and to investigate responses to different challenges, including people's interconnections with the environment.

In Year 9 / 10 Humanities, students cover a range of topics as prescribed by the Victorian curriculum.

- Civics and Citizenship
- Economics and Business
- Geography
- History

In Civics and Citizenship and Economics and Business, students explore the systems that shape society, with a specific focus on legal and economic systems. Students learn about Australia's role in global systems, and are encouraged to appreciate democratic principles and to contribute as active, informed and responsible citizens.

In History and Geography, students explore the processes that have shaped and which continue to shape different societies and cultures, to appreciate the common humanity shared across time and distance, and to evaluate the ways in which humans have faced and continue to face different challenges.



# Humanities

## Year 9 and 10

Students can also select from the following Humanities electives to study in Yr 9 / Yr 10:

### **Elective:**

#### **Money Talks**

This unit explores how people manage financial risks and rewards in the current Australian and global financial markets. You will explore financial risks such as scams and identity theft and consider strategies to avoid these, as well as the role of banks and other institutions, the difference between good and bad debt and how to manage debt, and identify ways consumers can protect themselves from risks.



# Humanities

Year 10

## VCE Electives:

### **Business Management, Units 1 & 2**

#### ***Unit 1: Planning a Business***

Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. The ability of entrepreneurs to establish a business and the fostering of conditions under which new business ideas can emerge are vital for a nation's wellbeing. Taking a business idea and planning how to make it a reality are the cornerstones of economic and social development. In this unit students explore the factors affecting business ideas and the internal and external environments within which businesses operate, as well as the effect of these on planning a business. They also consider the importance of the business sector to the national economy and social wellbeing.

#### ***Unit 2: Establishing a Business***

This unit focuses on the establishment phase of a business. Establishing a business involves compliance with legal requirements as well as decisions about how best to establish a system of financial record keeping, staff the business and establish a customer base. In this unit students examine the legal requirements that must be met to establish a business. They investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping. Students analyse management practices by applying key knowledge to contemporary business case studies from the past four years.

### **Legal Studies, Units 1 & 2**

#### ***Unit 1: Guilt and Liability***

In this unit students develop an understanding of legal foundations, such as the different types and sources of law and the existence of a court hierarchy in Victoria. Students investigate key concepts of criminal law and civil law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime, or liable in a civil dispute.

#### ***Unit 2: Sanctions, Remedies and Rights***

This unit focuses on the enforcement of criminal law and civil law, the methods and institutions that may be used to determine a criminal case or resolve a civil dispute, and the purposes and types of sanctions and remedies and their effectiveness.





# Humanities

## Year 10 *continued*

### VCE Electives *continued*:

#### **Modern History, Units 1 & 2**

##### ***Unit 1: Change and Conflict***

In this unit students investigate the nature of social, political, economic and cultural change in the latter part of the 19th century and the first half of the 20th century. Students explore the significant events, ideas, individuals and movements that shaped the social, political, economic and technological conditions and developments that have defined the modern world. They examine the end of empires and the emergence of new nation states before and after World War One, the emergence of conflict, and the causes of World War Two. They also focus on the social life and cultural expression in the late nineteenth century and the first half of the twentieth century, and their relation to the technological, political and economic changes of the period.

##### ***Unit 2: The changing world order***

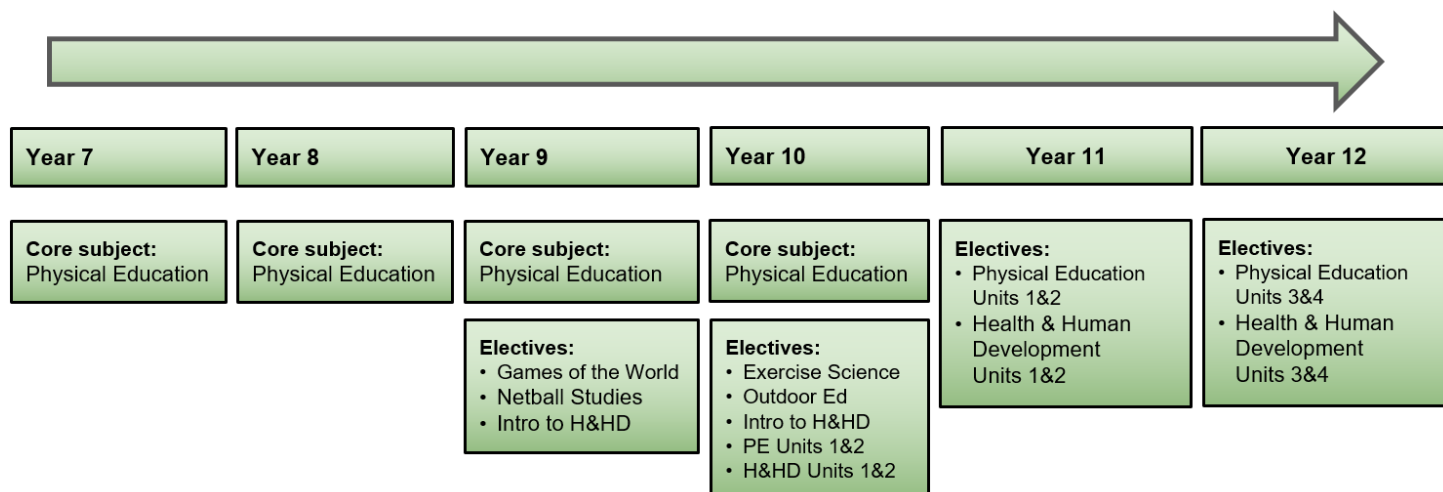
In Unit 2, students investigate the nature and impact of the Cold War and challenges and changes to social, political and economic structures and systems of power in the second half of the twentieth century and the first decade of the twenty-first century. Students focus on the causes and consequences of the Cold War, the competing ideologies that underpinned the events, and the causes of the end of the Cold War and the collapse of the USSR. They also focus on the ways in which traditional ideas, values and political systems were challenged and changed by individuals and groups in a range of contexts during the second half of the twentieth century and first decade of the twenty-first century. Students consider the extent to which ideas, values and political systems remain the same and/or change was resisted as well as exploring the causes of significant political and social events and movements and their consequences for nations and people.



# PEAT Hub

(Physical Education, The Arts, Technology)

## Health / Physical Education



### Year 9

#### Core Subjects:

#### Health and PE

In Year 9, students continue to develop proficiency in a range of high-level movement and manipulative skills, and focus on identifying and implementing ways of improving the quality of their performance during games, physical activities and sports.

#### Electives:

#### Games of the World

This subject will enable students to investigate the variety of games and sports that are played in various parts of the world. Elements of geography, history and culture will be learnt along the journey, and there is also plenty of time for hands-on practical sessions of the various activities. Students will have the opportunity to play the role of coach to present a game to the class.

#### Netball Studies

This subject will enable students to explore specific aspects of the sport including tactics and strategy, defensive and attacking skills and training for netball. Students will also develop umpiring and coaching skills.



# Health / Physical Education

## Year 9 *continued*

### Electives (*continued*):

#### **Intro to Health and Human Development**

Intro to Health is an engaging and informative subject designed to help students understand the various dimensions of health and wellbeing. In this course, students will explore essential topics such as the stages of the human lifespan, nutrition, the importance of maintaining healthy relationships and the dangers associated with risk taking behaviors such as vaping. By examining these areas, students will gain valuable insights into how to develop and sustain a healthy lifestyle. The course aims to equip young people with the knowledge and skills necessary to make informed decisions about their health, promoting their overall development and wellbeing.

This elective will help students prepare for VCE Health and Human Development.



# Health / Physical Education

## Year 10

### Core Subjects:

#### **Health and PE**

In Year 10 students continue to develop proficiency in a range of high-level movement and manipulative skills, and focus on identifying and implementing ways of improving the quality of their performance during games, physical activities and sports.

### Electives:

#### **Exercise Science**

Students will participate in a range of sporting and fitness activities to investigate and apply scientific and physiological concepts. This elective will serve as a solid introduction to those students intending to study VCE Physical Education. It will also enhance their interest and knowledge in the subject and can be applied to their own personal health, wellbeing and sporting pursuits.

#### **Outdoor Ed**

This program is designed to allow an opportunity for students to explore and participate in a range of practical activities, predominantly in the Outdoors. They will explore environmental issues and connections to indigenous culture. Students will have the opportunity to develop a range of skills including: Teamwork, Leadership and Individual work.

#### **Intro to Health and Human Development**

Intro to Health is an engaging and informative subject designed to help students understand the various dimensions of health and wellbeing. In this course, students will explore essential topics such as the stages of the human lifespan, nutrition, the importance of maintaining healthy relationships and the dangers associated with risk taking behaviors such as vaping. By examining these areas, students will gain valuable insights into how to develop and sustain a healthy lifestyle. The course aims to equip young people with the knowledge and skills necessary to make informed decisions about their health, promoting their overall development and wellbeing.

This elective will help students prepare for VCE Health and Human Development.



# Health / Physical Education

**Year 10 continued**

## **VCE Electives:**

### **Physical Education, Units 1 & 2**

#### ***Unit 1: The human body in motion***

In this unit, students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Students investigate the role and function of the main structures in each system and how they respond to movement. Through participation in practical activities, students explore and analyse the relationships between the body systems and movement, and how these systems interact and respond at various intensities. Students investigate possible conditions and injuries associated with the musculoskeletal system and recommend and implement strategies to minimise and manage such injuries and conditions. They consider the ethical implications of using permitted and prohibited practices to improve the performance of the body systems, evaluating perceived physiological benefits and describing potential harms.

#### ***Unit 2: Physical activity, sport, exercise and society***

This unit develops students' understanding of physical activity, sport and exercise from a participatory perspective. Students are introduced to types of physical activity and the role that physical activity participation and sedentary behaviour plays in their own health and wellbeing, as well as in other population groups and contexts.

Through a series of practical activities, students experience and explore different types of physical activity promoted within and beyond their community. They gain an appreciation of the movement required for health benefits and the consequences of physical inactivity and sedentary behaviour. Using various methods to assess physical activity and sedentary behaviour, students analyse data to investigate perceived barriers and enablers, and explore opportunities to enhance participation in physical activity. Students explore and apply the social-ecological model to critique a range of individual- and settings-based strategies that are effective in promoting participation in regular physical activity. They create and participate in a personal plan with movement strategies that optimise adherence to physical activity and sedentary behaviour guidelines.

By investigating a range of contemporary issues associated with physical activity, sport and exercise, students explore factors that affect access, inclusion, participation and performance. Students then select one issue at the local, national or global level and analyse key concepts within the issue, including investigating, participating in and prescribing movement experiences that highlight the issue.

Students develop an understanding of the historical and current perspectives on the issue and consider the future implications on participation and performance.



# Health / Physical Education

Year 10 *continued*

## VCE Electives *continued*:

### Health and Human Development, Units 1 & 2

#### *Unit 1: Understanding health and wellbeing*

In this unit, students explore health and wellbeing as a concept with varied and evolving perspectives and definitions. They come to understand that it occurs in many contexts and is subject to a wide range of interpretations, with different meanings for different people. As a foundation to their understanding of health, students investigate the World Health Organization's (WHO) definition and other interpretations. They also explore the fundamental conditions required for health as stated by the WHO, which provide a social justice lens for exploring health inequities.

In this unit, students identify perspectives relating to health and wellbeing, and inquire into factors that influence health attitudes, beliefs and practices, including among Aboriginal and Torres Strait Islander Peoples. Students look at multiple dimensions of health and wellbeing, the complex interplay of influences on health outcomes and the indicators used to measure and evaluate health status. With a focus on youth, the unit equips students to consider their own health as individuals and as a cohort. They build health literacy by interpreting and using data in a research investigation into one youth health focus area, and by investigating the role of food.

#### *Unit 2: Managing health and development*

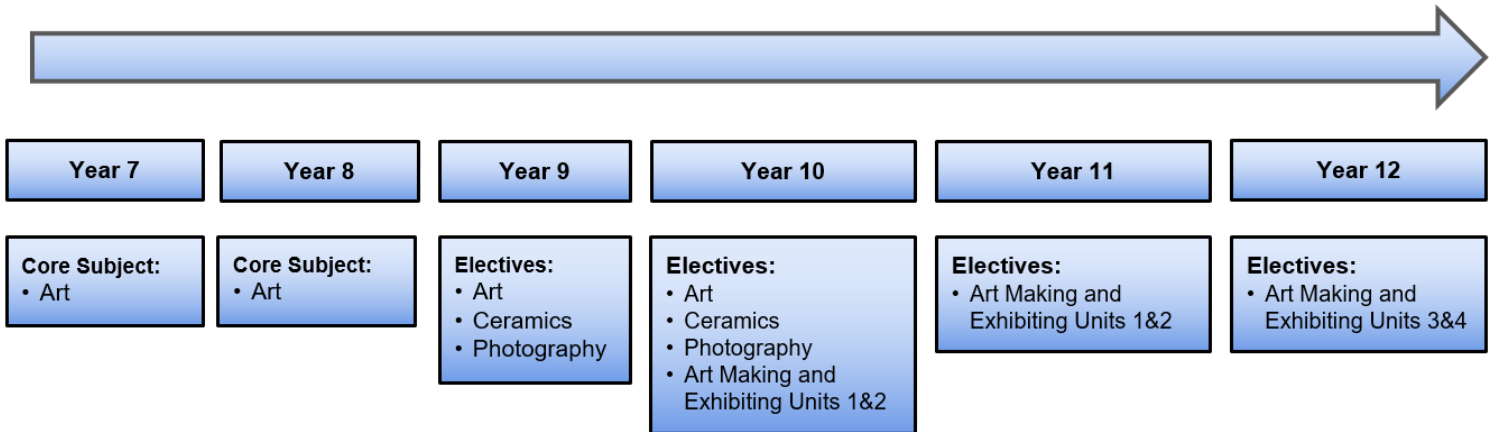
In this unit, students investigate transitions in health and wellbeing, and human development, from lifespan and societal perspectives. They explore the changes and expectations that are integral to the progression from youth to adulthood. Students apply health literacy skills through an examination of adulthood as a time of increasing independence and responsibility, involving the establishment of long-term relationships, possible considerations of parenthood and management of health-related milestones and changes.

Students explore health literacy through an investigation of the Australian healthcare system from the perspective of youth and analyse health information. They investigate the challenges and opportunities presented by digital media and consider issues surrounding the use of health data and access to quality health care.





# Art



## Year 9

### Electives:

#### Art

In year 9, Art students build on the skills and knowledge covered in the junior core program. They identify and explain how artists and audiences interpret artworks through different viewpoints, cultures, times and locations. They make and respond to visual artworks, adapt ideas, visual images and practises from selected artists and use them to inspire and inform their own personal aesthetic. Students will use a visual diary to plan and design artworks that express ideas, concepts, artistic intentions and evaluations. This will include creating both 2D and 3D sculptural artworks.

#### Ceramics

Ceramics comprises both pottery and modelled ceramic sculpture and introduces the very basics of ceramic chemistry and the physics of the ceramic process. The sculpture component incorporates assemblage, modelling, and carving processes and techniques. Students are introduced to working on the pottery wheel at this year level. Students will develop drawing and three-dimensional design skills that will lead to studio work. Sculpture and ceramics skills are explored with the aim to develop in students an understanding of the elements and principles of Art with a focus on form, surface, texture, shape and space. Ceramic artists research, appreciation and analysis is linked to studio work.

#### Photography

In year 9, photography students learn and apply the basics of digital photography in the creation of a folio of images. Students learn to incorporate the use of art elements within their imagery, and consider lighting and composition. Students are introduced to editing and refining images in photoshop. Students will also analyse, interpret and evaluate a range of photographers and photography artworks from different cultures, historical and contemporary contexts.

# Art

## Year 10

### Electives:

#### **Art**

In year 10 art students explore the visual art practises and styles as inspiration to develop a personal style and themes in artworks. Students explore how other artists manipulate materials and techniques in their artworks. Students will use a visual diary to plan and design artworks that express ideas, concepts, artistic intentions and evaluations. This will include creating a folio and both 2D and 3D sculptural artworks.

#### **Ceramics**

Ceramics comprises both pottery and modelled ceramic sculpture and introduces the very basics of ceramic chemistry and the physics of the ceramic process. The sculpture component incorporates assemblage, modelling, and carving processes and techniques. Students are introduced to working on the pottery wheel at this year level. Students will develop drawing and three-dimensional design skills that will lead to studio work. Sculpture and ceramics skills are explored with the aim to develop in students an understanding of the elements and principles of Art with a focus on form, surface, texture, shape and space. Ceramic artists research, appreciation and analysis is linked to studio work.

#### **Photography**

In year 10 photography students will increase skills in the use of digital compact and SLR cameras. They will explore techniques in creating successful imagery through lighting and composition. Students will become familiar with various tools in photoshop and trial editing and compositing techniques. Students will also analyse, interpret and evaluate a range of photographers and photography artworks from different cultures, historical and contemporary contexts. Students will create a folio and final prints of their photography works.



# Art

## Year 10 *continued*

### **VCE Electives:**

#### **Art Making and Exhibiting – Units 1 and 2**

##### ***Unit 1: Explore, expand and investigate***

In this unit students explore materials, techniques and processes in a range of art forms. They expand their knowledge and understanding of the characteristics, properties and application of materials used in art making. They explore selected materials to understand how they relate to specific art forms and how they can be used in the making of artworks. Students also explore the historical development of specific art forms and investigate how the characteristics, properties and use of materials and techniques have changed over time. Throughout their investigation students become aware of and understand the safe handling of materials they use.

Students explore the different ways artists use materials, techniques and processes. The students' exploration and experimentation with materials and techniques stimulates ideas, inspires different ways of working and enables a broad understanding of the specific art forms. Their exploration and experimentation is documented in both visual and written form in a Visual Arts journal.

##### ***Unit 2: Understand, develop and resolve***

In Unit 2 students continue to research how artworks are made by investigating how artists use aesthetic qualities to represent ideas in artworks. They broaden their investigation to understand how artworks are displayed to audiences, and how ideas are represented to communicate meaning.

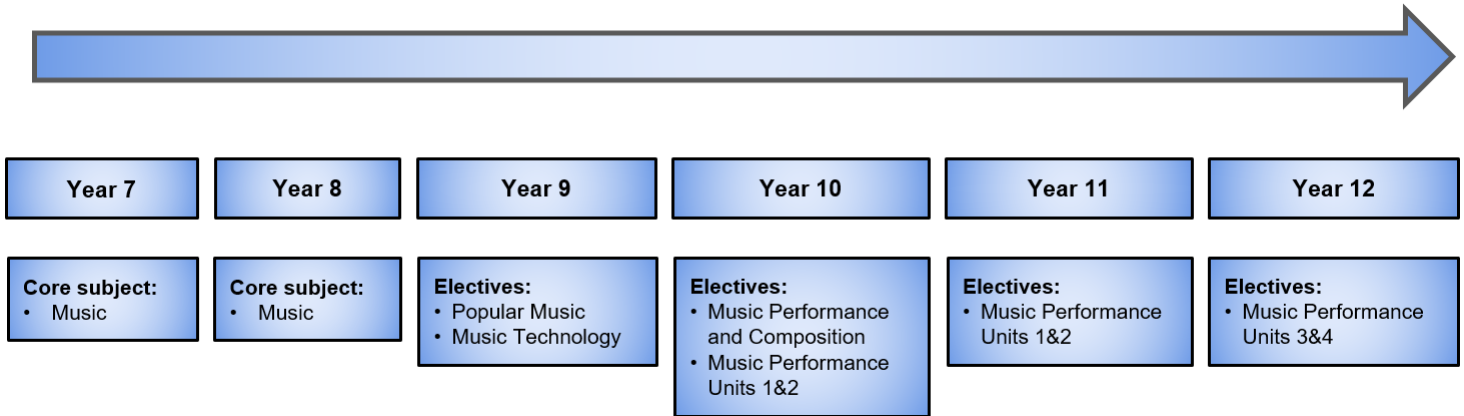
Students respond to a set theme and progressively develop their own ideas. Students learn how to develop their ideas using materials, techniques and processes, and art elements and art principles. They consolidate these ideas to plan and make finished artworks, reflecting on their knowledge and understanding of the aesthetic qualities of artworks. The planning and development of at least one finished artwork are documented in their Visual Arts journal.

Students investigate how artists use art elements and art principles to develop aesthetic qualities and style in an artwork. Working in their Visual Arts journal they begin to discover and understand how each of the art elements and art principles can be combined to convey different emotions and expression in their own and others' artworks. They also explore how art elements and art principles create visual language in artworks.

Students begin to understand how exhibitions are planned and designed and how spaces are organised for exhibitions. They also investigate the roles associated with the planning of exhibitions and how artworks are selected and displayed in specific spaces. This offers students the opportunity to engage with exhibitions, whether they are in galleries, museums, other exhibition spaces or site-specific spaces.



# Music



## Year 9

### Electives:

#### Popular Music

Popular Music explores the history and development of popular music in western culture, focusing particularly on the development of Ragtime, Blues, Swing, Jazz, Rock 'n' Roll and beyond. Students research and discuss the social and political context of an era and identify the subsequent influences on the Popular Music culture of the time. This unit also has a significant practical component, developing instrumental skills with a focus on composition and arrangement.

#### Music Technology

Music Technology explores the study of music using technology in different formats. Students study music through the use of different music programs, particularly working with Garageband & Audacity, Pro Tools, Sibelius, and Notion. Students will compose and arrange different pieces of music using these programs, with both, pre-existing musical resources and recordings that students create.



# Music

## Year 10 *continued*

### Electives:

#### **Music Performance & Composition**

This unit involves the study of performance and composition techniques including composition, music theory and skill development, focusing particularly on the student's individual instrument/s.

Students have the opportunity to focus on their own skill development on their own instrument, developing technical and personal skills through performance opportunities. It is recommended that students choosing this Music unit have some skill and experience in singing and/or playing a musical instrument and have ideally completed Music at Year 9.

### VCE Electives:

#### **Music Performance**

##### ***Unit 1: Organisation of music***

In this unit students explore and develop their understanding of how music is organised. By performing, creating, analysing and responding to music works that exhibit different approaches, students explore and develop their understanding of the possibilities of musical organisation.

They prepare and perform ensemble and/or solo musical works to develop technical control, expression and stylistic understanding on their chosen instrument/sound source. At least two works should be associated with their study of approaches to music organisation.

They create (arrange, compose or improvise) short music exercises that reflect their understanding of the organisation of music and the processes they have studied.

They develop knowledge of music language concepts as they analyse and respond to a range of music, becoming familiar with the ways music creators treat elements of music and concepts and use compositional devices to create works that communicate their ideas.



# Music

**Year 10 *continued***

## **VCE Electives:**

### **Music Performance (continued)**

#### ***Unit 2: Effect in music***

In this unit, students focus on the way music can be used to create an intended effect. By performing, analysing and responding to music works/examples that create different effects, students explore and develop their understanding of the possibilities of how effect can be created. Through creating their own music, they reflect this exploration and understanding.

Students prepare and perform ensemble and/or solo musical works to develop technical control, expression and stylistic understanding using their chosen instrument/sound source. They should perform at least one work to convey a specified effect and demonstrate this in performance.

They create (arrange, compose or improvise) short music exercises that reflect their understanding of the organisation of music and the processes they have studied.

As they analyse and respond to a wide range of music, they become familiar with the ways music creators treat elements and concepts of music and use compositional devices to create works that communicate their ideas. They continue to develop their understanding of common musical language concepts by identifying, recreating and notating these concepts.



# Drama



Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Core Subject: • Drama	Core Subject: • Drama	Electives: • Drama	Electives: • Drama	Electives: • Drama Units 1&2 • Theatre Studies Units 1&2	Electives: • Drama Units 3&4 • Theatre Studies Units 3&4

## Year 9

### Electives:

#### Drama

Year 9 Drama aims to explore the process of play production from the pre-rehearsal through to the post-production stage. This course will incorporate dramatic skills such as auditioning, script reading and characterisation, as well as playmaking techniques. Drama is a pathway study for VCE Drama.

## Year 10

### Electives:

#### Drama

The study of drama involves the exploration of a range of dramatic elements including the development of improvisation and acting skills, script-writing and individual and group performance skills, with an emphasis on the student as an actor. Students further develop skills in working with dramatic elements and also develop a vocabulary to enable them to respond effectively to dramatic performances.



# Design and Digital Technology



Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
<b>Core subjects:</b> <ul style="list-style-type: none"> <li>• Digital Technology</li> <li>• Home Economics</li> <li>• Textiles</li> <li>• Wood, Metal &amp; Plastics</li> </ul>	<b>Core subjects:</b> <ul style="list-style-type: none"> <li>• Digital Technology</li> <li>• Home Economics</li> <li>• Textiles</li> <li>• Wood, Metal &amp; Plastics</li> </ul>	<b>Electives:</b> <ul style="list-style-type: none"> <li>• Computer Aided Design</li> <li>• Digital Media</li> <li>• Systems-Mechatronics</li> <li>• Metal</li> <li>• Wood</li> <li>• Textiles</li> <li>• Cooking for Celebrations</li> <li>• Multicultural Cooking</li> </ul>	<b>Electives:</b> <ul style="list-style-type: none"> <li>• Computer Aided Design</li> <li>• Asian Foods</li> <li>• Survival Foods</li> <li>• Food for Fitness</li> <li>• My Kitchen Hamper</li> <li>• Textiles</li> <li>• Furniture Making</li> <li>• Systems-Mechatronics Advanced</li> <li>• Digital Media</li> <li>• Product Design &amp; Technology Units 1&amp;2 (Textiles OR Wood, Metal &amp; Plastics)</li> <li>• Systems Engineering Units 1&amp;2</li> <li>• Food Studies Units 1&amp;2</li> </ul>	<b>Electives:</b> <ul style="list-style-type: none"> <li>• Product Design &amp; Technology Units 1&amp;2 (Textiles OR Wood, Metal &amp; Plastics)</li> <li>• Systems Engineering Units 1&amp;2</li> <li>• Food Studies Units 1&amp;2</li> </ul>	<b>Electives:</b> <ul style="list-style-type: none"> <li>• Product Design &amp; Technology Units 3&amp;4 (Textiles OR Wood, Metal &amp; Plastics)</li> <li>• Systems Technology Units 3&amp;4</li> <li>• Food Studies Units 3&amp;4</li> </ul>



# Design and Digital Technology

## Year 9

### Electives:

#### **Computer Aided Design**

Computer Aided Design (CAD) is a Technology subject, therefore a technical perspective will be taken to the teaching and learning strategies used throughout the unit. CAD involves using the computer and software to produce three dimensional design drawings and plans.

#### **Digital Media**

In Digital Technologies, students are actively engaged in the process of analysing problems, designing, developing and evaluating digital solutions, and creating and sharing information using computers. Students learn to safely and ethically create digital solutions. These solutions and information are created through the application of computational, design and systems thinking, and technical skills.

#### **Systems – Mechatronics**

Systems Mechatronics combines both Electronic and Mechanical principles. Students consider the principles, structure, logic and organisation of systems, and research how community and industrial standards affect the design and development of systems. Students increasingly understand the components of systems as well as how changes made to inputs and processes affect output. Students work with a range of systems that combine mechanical and electronic principles ie (Mechatronics)

#### **Metal**

Students explore the social and environmental implications of using various materials. They start to recognize that the supply of some materials is limited, and examine possibilities for reusing and recycling materials. They use materials tests to determine the appropriateness of materials for particular purposes. Students design and produce a range of products using hand and power tools and a range of welding processes.

#### **Wood**

There are three phases involved in the technology process. These are: Investigating/designing, Production and Analysing/evaluating. Each stage involves research and the development and application of knowledge, skills, equipment, materials and information to create useful products. Students explore various materials. Students design, produce and evaluate a range of products using hand and power tools.

#### **Textiles**

In Year 9 textiles, students design, produce and evaluate a product according to an identified need or opportunity. They maintain a design folio with a criterion for success, including sustainability, considerations and use it to investigate, generate and produce a quality design solution.



# Design and Digital Technology

## Year 9 *continued*

### Electives *continued*:

#### **Cooking for Celebrations**

This subject focuses on planning and preparing for a range of celebrations involving both traditional and non-traditional foods – Christmas, friend’s parties, family birthdays, etc. Sweet and savoury foods as well as cake decorating are included.

#### **Multicultural Cooking**

In one part of the semester, students study a variety of cultures which have influences on our eating patterns – Asian, Thai, Italian, French, Indian etc. Relevant cooking methods and reasons why certain foods are used are studied. Each week a typical meal from each country is prepared. In the other part of the semester students work in pairs to research a country of their choice. They complete a major assignment on this country and present it to the class. Each pair of students selects an appropriate recipe which is prepared in the class.



# Design and Digital Technology

## Year 10

### Electives:

#### **Computer Aided Design**

CAD (Computer Aided Design) is an exciting STEM course that allows students to use their creativity to develop solutions to real world problems, needs and opportunities. Computer Aided Design (CAD) allows students to take an idea and turn it into reality faster than using manual production techniques and to a much higher standard.

The CAD course allows students to start drawing in 2 dimensions and move on into 3 dimensional drawing. The recent explosion onto the market of affordable 3D printers means that students will also be able to create 3D drawings and produce them. The software used in the CAD course is industry standard and provides students with a workplace ready skill and the ability to easily move from one software platform to another in the industry., TAFE and University, giving students an edge in further education and training.

#### **Asian Foods**

This subject will focus on looking at a number of Asian cultures with particular emphasis on their foods, cultural events and cooking methods.

#### **Survival Foods**

This subject aims to provide students with the necessary skills to enable them to look after themselves in terms of cooking when they leave home.

#### **Food for Fitness**

This subject examines up to date nutritional information translated into recipes that are relatively easy to prepare and cover all food types and meals. The focus will be on preparing a wide variety of foods to provide for maximum energy and everyday fitness.

#### **My Kitchen Hamper**

This subject will focus on exploring the processes, methods and terminologies that are used in VCE Food Studies. It also gives students a chance to use various equipment and ingredients that they would not have previously had a chance to use and/or be exposed to. It is a 'taster' to Units 1&2 Food Studies and 'The Design Process' is studied in greater detail. Students are asked to research, design and then produce a 'Hamper'. This must contain various food items that have been produced using various processes and methods learnt throughout the unit. For example, the Hamper may contain a quince paste, bread or crackers of some sort, lemon curd, jam, relish, tarts, pies, puddings, infused oils, etc.



# Design and Digital Technology

## Year 10 *continued*

### Electives *continued*:

#### **Textiles**

Wearable Art builds on pre-established skills with an emphasis on creative design. Students design and produce a garment based on a theme. Students continue to develop their design skills, their understanding of the design elements and explore known and new materials and how they can be manipulated. There are no prerequisites for Year 10 Textiles.

#### **Furniture Making**

Students explore the social and environmental implications of using wooden materials. They start to recognize that the supply of some materials is limited, and examine possibilities for reusing and recycling materials. They use materials tests to determine the appropriateness of materials for particular purposes. Students design and produce a range of products using hand and power tools.

#### **Systems – Mechatronics Advanced**

Students build on their knowledge gained in Year 9 Systems. Mechatronic systems combines both mechanical and electronic principles. Students consider the principles, structure, logic and organisation of systems, and research how community and industrial standards affect the design and development of systems.

#### **Digital Media**

In Digital Technology, students are actively engaged in the process of analysing problems, designing, developing and evaluating digital solutions, and creating and sharing information using computers. Students learn to safely and ethically create digital solutions. These solutions and information are created through the application of computational, design and systems thinking, and technical skills.



# Design and Digital Technology

## Year 10 *continued*

### **VCE Electives:**

#### **Product Design and Technology Units 1 & 2 (Textiles *OR* Wood, Metal, Plastics)**

##### ***Unit 1: Sustainable Product Redevelopment***

This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability.

It is common for designers in Australia to use products from overseas as inspiration when redeveloping products for the domestic market. Sustainable redevelopment refers to designers and makers ensuring products serve social, economic and environmental needs. Generating economic growth for design and manufacturing in Australia can begin with redeveloping existing products so they have positive social and minimal environmental impact. In this unit students examine claims of sustainable practices by designers.

Students consider the sustainability of an existing product, such as the impact of sourcing materials, manufacture, distribution, use and likely disposal. They consider how a redeveloped product should attempt to solve a problem related to the original product. Where possible, materials and manufacturing processes used should be carefully selected to improve the overall sustainability of the redeveloped product.

In Area of Study 1 students consider the sustainability of an existing product and acknowledge the intellectual property (IP) rights of the original designer. Working drawings (also known as flats, trade sketches, assembly or technical drawings) are used to present the preferred design option.

In Area of Study 2, students produce a redeveloped product using tools, equipment, machines and materials, taking into account safety considerations. They compare their product with the original design and evaluate it against the needs and requirements outlined in their design brief.

##### ***Unit 2: Collaborative Design***

In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including end-user/s' needs and wants; function, purpose and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution.

Teamwork encourages communication between students and mirrors professional design practice where designers often work within a multi-disciplinary team to develop solutions to design problems. Students also use digital technologies to facilitate teams to work collaboratively online.

In this unit students gain inspiration from an historical or a contemporary design movement or style and its defining factors such as ideological or technological change, philosophy or aesthetics.

In Area of Study 1, students work both individually and as members of a small design team to address a problem, need or opportunity and consider user-centred design factors. They design a product within a range, based on a theme, or a component of a group product. They research and refer to a chosen design style or movement. In Area of Study 2 the finished product is evaluated.



# Design and Digital Technology

**Year 10 continued**

## **VCE Electives:**

### **Systems Engineering Units 1 & 2**

#### ***Unit 1: Mechanical Systems***

This unit focuses on engineering fundamentals as the basis of understanding concepts, principles and components that operate in mechanical systems. The term 'mechanical systems' includes systems that utilise all forms of mechanical components and their linkages. While this unit contains the fundamental physics and theoretical understanding of mechanical systems and how they work, the focus is on the creation of a system. The creation process draws heavily upon design and innovation processes. Students create an operational system using the systems engineering process. The focus is on a mechanical system; however, it may include some electrotechnological components. All systems require some form of energy to function. Students research and quantify how systems use or convert the energy supplied to them. Students are introduced to mechanical engineering principles including mechanical subsystems and devices, their motions, elementary applied physics, and related mathematical calculations that can be applied to define and explain the physical characteristics of these systems.

#### ***Unit 2: Electrotechnology Systems***

In this unit students study fundamental electrotechnological engineering principles. The term 'electrotechnological' encompasses systems that include electrical/electronic circuitry including microelectronic circuitry. Through the application of the systems engineering process, students create operational electrotechnological systems, which may also include mechanical components or electro-mechanical subsystems.

While this unit contains fundamental physics and theoretical understanding of electrotechnological systems and how they work, the focus is on the creation of electrotechnological systems, drawing heavily upon design and innovation processes.



# Design and Digital Technology

## Year 10 *continued*

### **VCE Electives:**

#### **Food Studies Units 1 & 2**

##### ***Unit 1: Food Origins***

In this unit students focus on food from historical and cultural perspectives, and investigate the origins and roles of food through time and across the world. In Area of Study 1 students explore how humans have historically sourced their food, examining the general progression from hunter-gatherer to rural-based agriculture, to today's urban living and global trade in food. Students consider the origins and significance of food through inquiry into one particular food-producing region of the world.

In Area of Study 2 students focus on Australia. They look at Australian indigenous food prior to European settlement and how food patterns have changed since, particularly through the influence of food production, processing and manufacturing industries and immigration. Students investigate cuisines that are part of Australia's culinary identity today and reflect on the concept of an Australian cuisine.

Students consider the influence of innovations, technologies and globalisation on food patterns. Throughout this unit they complete topical and contemporary practical activities to enhance, demonstrate and share their learning with others.

##### ***Unit 2: Food makers***

In this unit students investigate food systems in contemporary Australia. Area of Study 1 focuses on commercial food production industries, while Area of Study 2 looks at food production in domestic and small-scale settings, as both a comparison and complement to commercial production. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers.

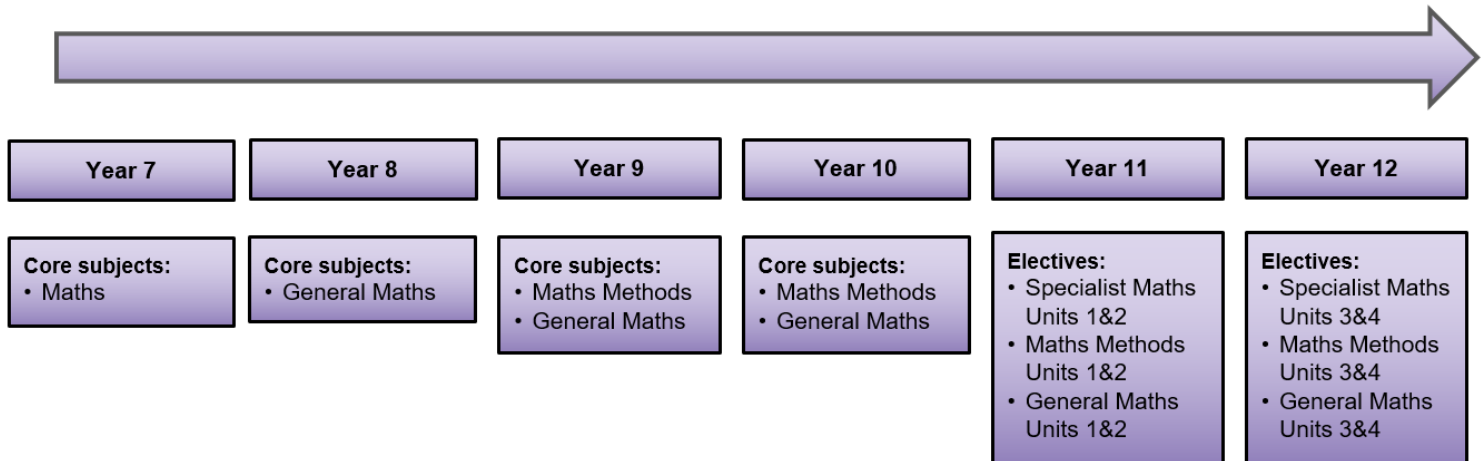
Students use practical skills and knowledge to produce foods and consider a range of evaluation measures to compare their foods to commercial products. They consider the effective provision and preparation of food in the home, and analyse the benefits and challenges of developing and using practical food skills in daily life. In demonstrating their practical skills, students design new food products and adapt recipes to suit particular needs and circumstances. They consider the possible extension of their role as small-scale food producers by exploring potential entrepreneurial opportunities.



# STEM Hub

## (Science and Mathematics)

### Mathematics



#### Year 9

#### Core Subjects:

#### Mathematics – General / Methods / Foundation

Mathematics provides students with access to important mathematical ideas, knowledge and skills that they will draw on in their personal and work lives. The curriculum also provides students, as life-long learners, with the basis on which further study and research in mathematics and applications in many other fields are built.

Year 9 students have 4 hours per week for Mathematics. They will be engaged in activities from the areas of Number, Algebra, Measurement, Geometry, Statistics and Probability.

Year 9 offers an extension program for students wanting to study VCE Mathematical Methods. The best indicator of whether a student should progress to Year 9 Maths Methods is their willingness to work hard. Any students wishing to participate in this program should be performing at 'B' grade level at a minimum in Year 8, particularly in Algebra.

Extension students will complete the Year 9 program plus the extension topics of Advanced Linear Relations, Non-linear Relations and Advanced Trigonometry.





# Mathematics

## Year 10

### Core Subjects:

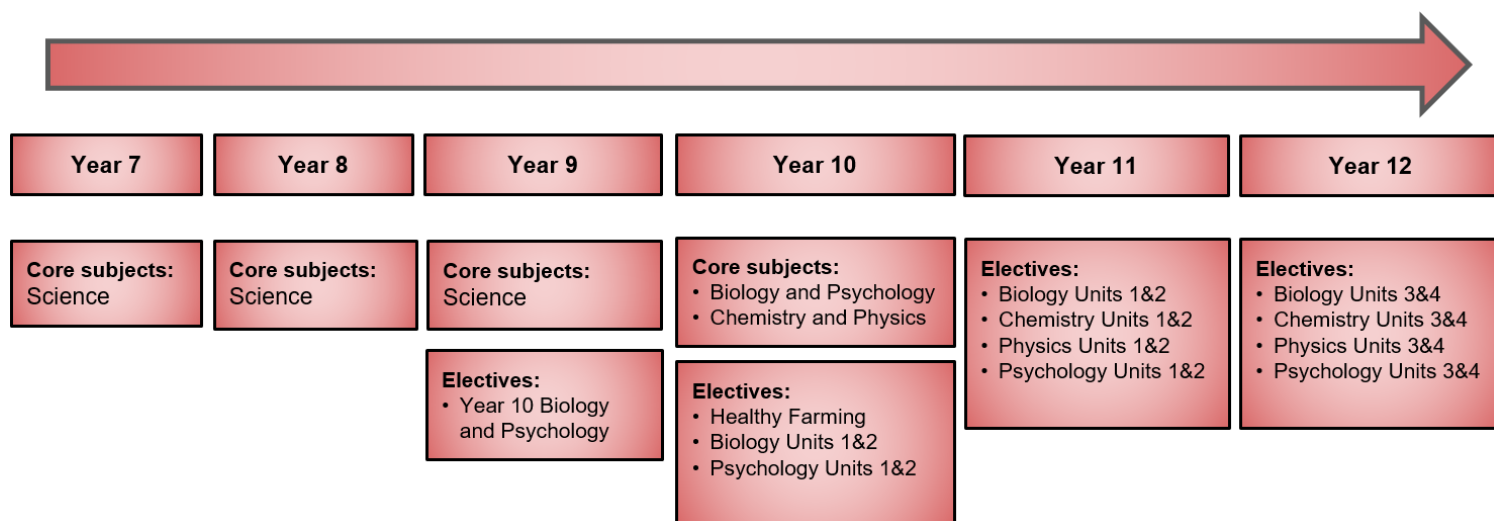
#### **Mathematics – General / Methods / Foundation**

Year 10 students have 4 hours per week for Mathematics. They will be engaged in activities from the areas of Number, Algebra, Measurement, Geometry, Statistics and Probability.

Year 10 offers an extension program for students wanting to study VCE Mathematical Methods. These students will have already completed the Year 9 extension program, and will complete the Year 10 program plus extension topics: Non-linear relations, Surds and Logs.



# Science



This course will help students to become scientifically and technologically literate citizens who will be able to make decisions about their lifestyle, their environment and the kind of society in which they wish to live. Students will see the connections between science and people, and be aware of the impact of science and technology on society, the individual, and the environment. Curiosity and a spirit of inquiry that helps students to be open-minded and value objectivity will be encouraged.

## Year 9

### Core Subjects:

#### Science

During this course of study students explain chemical processes and natural radioactivity in terms of atoms and energy transfers and describe examples of important chemical reactions. They describe models of energy transfer and apply these to explain phenomena. They explain global features and events in terms of geological processes and timescales. They analyse how biological systems function and respond to external changes with reference to interdependencies, energy transfers and flows of matter. They describe social and technological factors that have influenced scientific developments and predict how future applications of science and technology may affect people's lives.

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

# Science

**Year 9 *continued***

## **Electives:**

### **Year 10 Biology and Psychology (Semester Unit)**

In this semester unit students will study both Biology and Psychology. Students use models and diagrams to represent the relationship between DNA, genes and chromosomes, they describe mutations as changes in DNA or chromosomes and outline the factors that contribute to causing mutations. They will recognise that genetic information is passed onto offspring from both parents and involves the processes of fertilisation and meiosis.

Students are introduced to the theory of evolution by natural selection which explains the diversity of living things and is supported by a range of scientific evidence. They consider how the theory of plate tectonics explains global patterns of geological activity and continental movement.

Students explain (using models, flow diagrams or simulations) how body systems work together to maintain a functioning body. They discover how an animal's response to a stimulus is coordinated by its central nervous system (brain and spinal cord). They model neurons and simulate the transmission of electrical impulses and communication via synapses. You will learn that the study of psychology is a journey of discovery about you and your amazing brain. Through practical experiences, and research you will develop investigative and communication skills.



# Science

Year 10

## Core Subjects:

### **Biology and Psychology (Semester Unit)**

*Biology* - Students use models and diagrams to represent the relationship between DNA, genes and chromosomes, they describe mutations as changes in DNA or chromosomes and outline the factors that contribute to causing mutations. Students will recognise that genetic information is passed onto offspring from both parents and involves the processes of fertilisation and meiosis. Students are introduced to the theory of evolution by natural selection which explains the diversity of living things and is supported by a range of scientific evidence. They consider how the theory of plate tectonics explains global patterns of geological activity and continental movement.

*Psychology* - Students explain (using models, flow diagrams or simulations) how body systems work together to maintain a functioning body. Students discover how an animal's response to a stimulus is coordinated by its central nervous system (brain and spinal cord). They model neurons and simulate the transmission of electrical impulses and communication via synapses. You will learn that the study of psychology is a journey of discovery about you and your amazing brain. Through practical experiences, and research you will develop investigative and communication skills.

### **Chemistry and Physics (Semester Unit)**

*Chemistry* - Students discover that chemical reactions involve rearranging atoms to form new substances; during a chemical reaction mass is not created or destroyed. Different types of chemical reactions are used to produce a range of products and can occur at different rates; chemical reactions may be represented by balanced chemical equations. Chemical reactions, including combustion and the reactions of acids, are important in both non-living and living systems and involve energy transfer

*Physics* - Students describe and explain how the motion of objects involves the interaction of forces and the exchange of energy and can be described and predicted using the laws of physics. They discover that the Universe contains features including galaxies, stars and solar systems. The Big Bang theory can be used to explain the origin of the Universe. Energy flow in Earth's atmosphere can be explained by the processes of heat transfer.



# Science

## Year 10 *continued*

### Electives:

#### **Healthy Farming**

Students will apply their knowledge of ecosystems, biotic and abiotic components of the environment; matter and energy flow to small-scale agricultural activities including propagation techniques for food and herb growing along with fruit production. They will consider how global systems, including the carbon cycle are involved in building soil nutrients, recycling matter and modern farming practices.

This elective introduces students to horticultural and primary production of food.

### VCE Electives:

#### **Biology 1 & 2**

##### ***Unit 1: How do organisms regulate their functions?***

In unit 1, students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, including the requirements for sustaining cellular processes. Students focus on cell growth, replacement and death and the role of stem cells in differentiation, specialisation and renewal of cells. They explore how systems function through cell specialisation in vascular plants and animals, and consider the role homeostatic mechanisms play in maintaining an animal's internal environment.

##### ***Unit 2: How does inheritance impact on diversity?***

In unit 2, students explore reproduction and the transmission of biological information from generation to generation and the impact this has on species diversity. They apply their understanding of chromosomes to explain the process of meiosis. Students consider how the relationship between genes, and the environment and epigenetic factors influence phenotypic expression. They explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses.

Students analyse the advantages and disadvantages of asexual and sexual reproductive strategies, including the use of reproductive cloning technologies. They study structural, physiological and behavioural adaptations that enhance an organism's survival. Students explore interdependencies between species, focusing on how keystone species and top predators structure and maintain the distribution, density and size of a population. They also consider the contributions of Aboriginal and Torres Strait Islander knowledge and perspectives in understanding the survival of organisms in Australian ecosystems.



# Science

Year 10 *continued*

## VCE Electives *continued*:

### Psychology 1 & 2

#### *Unit 1: How are behaviour and mental processes shaped?*

In this unit students examine the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary knowledge from Western and non-Western societies, including Aboriginal and Torres Strait Islander peoples, has made to an understanding of psychological development and to the development of psychological models and theories used to predict and explain the development of thoughts, emotions and behaviours. They investigate the structure and functioning of the human brain and the role it plays in mental processes and behaviour and explore brain plasticity and the influence that brain damage may have on a person's psychological functioning.

#### *Unit 2: How do internal and external factors influence behaviour and mental processes?*

In this unit students evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of individuals and groups, recognising that different cultural groups have different experiences and values. Students are encouraged to consider Aboriginal and Torres Strait Islander people's experiences within Australian society and how these experiences may affect psychological functioning.

Students examine the contribution that classical and contemporary research has made to the understandings of human perception and why individuals and groups behave in specific ways. Students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted.



# Wellbeing

## Wellbeing – Oak Program

The Oak program is designed to specifically target the wellbeing needs of students at each Year level. A variety of concepts are explored, as at Marian college, we view the wellbeing of students being interconnected with their academic achievement. In addition to this, the OAK program enables students to develop an understanding of the importance of respectful relationships, a positive approach to education and finding the right balance in their lives.

At Marian College, our wellbeing vision statement states the following:

“We value and respect the dignity of our students. We believe that positive student wellbeing is central to student learning. We believe that positive student wellbeing is central to student learning. We believe that positive relationships between students and their teachers is of the utmost importance. We commit to restorative practices, wherein the voices of students and teachers are both heard and conflict is resolved calmly and fairly. We acknowledge the immense value of building strong connections with parents and families and believe this in turn aides in our students’ growth. We believe that the education we offer at Marian College shapes well-rounded, empathetic and inspired citizens.”

## Year 9

In Year 9 Wellbeing, students explore critical aspects of adolescent life, including managing common challenges such as sleep issues, body image, and mental health. Through a combination of self-reflection and self-regulation strategies, students learn to navigate these areas effectively. They engage in accountable talk, utilizing helpful sentence stems to foster meaningful conversations and support each other. The curriculum emphasizes the importance of understanding and addressing these challenges proactively, promoting a healthy balance in their daily lives and overall well-being. Further to this, teachers use the ABC paradigm, a foundational concept of Cognitive Behavioural Therapy, to tackle the real issues facing young people today in a way that is empowering to students, and which promotes empathy and critical thinking.

## Year 10

Students in Year 10 focus on personal growth in all areas. They examine the way the brain functions as a muscle that can grow and alter and how each person has the potential to learn (just not in the same way at the same time). Students explore study skills that may assist them, as well as looking at ways of managing stresses that confront students at this age. Students also look at their connections with others and consider how their thoughts, actions and words matter, and how they impact upon others. Further to this, teachers use the ABC paradigm, a foundational concept of Cognitive Behavioural Therapy, to tackle the real issues facing young people today in a way that is empowering to students, and which promotes empathy and critical thinking.



# Web Preferences Access Guide

(A **SAMPLE** of the email your child will receive):

The following steps outline how to enter your subject preferences online.

<p><b>1</b> Internet Access</p>	<p>You will need a computer with an internet connection and a printer. We recommend using Firefox, you may also use Google Chrome or IE 6.0 and above.</p>						
<p><b>2</b> Log In</p>	<p>Log In to <a href="http://www.selectmysubjects.com.au">www.selectmysubjects.com.au</a> using:</p> <table border="1"> <tr> <td colspan="2"> <a href="#">Click here to open Web Preferences</a> </td> </tr> <tr> <td>Student Access Code:</td> <td><b>Your Access Code will be here</b></td> </tr> <tr> <td>Password:</td> <td><b>Eg: 1a2b3c</b></td> </tr> </table>	<a href="#">Click here to open Web Preferences</a>		Student Access Code:	<b>Your Access Code will be here</b>	Password:	<b>Eg: 1a2b3c</b>
<a href="#">Click here to open Web Preferences</a>							
Student Access Code:	<b>Your Access Code will be here</b>						
Password:	<b>Eg: 1a2b3c</b>						
<p><b>3</b> Home Page</p>	<p>To view your subject information, click "<b>View Subject Details</b>" at the top right of the screen. To select/change your preferences, click "<b>Add New Preferences</b>" at the top right of the screen.</p>						
<p><b>4</b> Preference Selection</p>	<p>Select your subjects from the drop down lists, you have 30 minutes to do so. Once complete, click "<b>Proceed</b>". Note: You are not finished yet.</p>						
<p><b>5</b> Preference Validation</p>	<p>If you are happy with your preferences click "<b>Submit Valid Preferences</b>" which will open your "Preference Receipt". Or if you would like to make changes to your preferences click "<b>Cancel</b>" and this will take you back to the Preference Selection page.</p>						
<p><b>6</b> Preference Receipt</p>	<p>You can print your "Preference Receipt" by clicking "<b>Open Print View</b>" and clicking "<b>Print Receipt</b>". To continue click "<b>Return to Home Page</b>". If you want to change your preferences, repeat the process by clicking "<b>Add New Preferences</b>", otherwise exit by clicking "<b>Log Out</b>". End of steps.</p>						

**IMPORTANT:**

All Subject selections **MUST** be completed online via Web preferences by 16th August 2024.

*Students will receive an email from web preferences regarding access to the student portal.*

